



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Turf Merchants, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

FESCUE, TALL

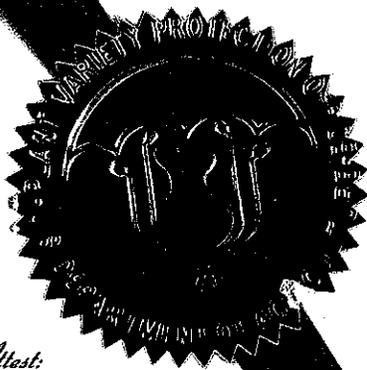
'Millennium'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this twenty-fifth day of April, in the year two thousand and five.

Attest:

Blmze
 Commissioner
 Plant Variety Protection Office
 Agricultural Marketing Service

Mill Johnson
 Secretary of Agriculture



U.S. DEPARTMENT OF AGRICULTURE
 AGRICULTURAL MARKETING SERVICE
 SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

The following state rents are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
 (Instructions and information collection burden statement on reverse)

1. NAME OF OWNER Turf Merchants, Inc.		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME TMI-RBR	3. VARIETY NAME Millennium
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) 33390 Tangent Loop Tangent, Oregon 97389		5. TELEPHONE (include area code) (541)926-8649	FOR OFFICIAL USE ONLY
		6. FAX (include area code) (541)926-4435	PVPO NUMBER 9900368
7. IF THE OWNER NAMED IS NOT A "PERSON". GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.)	8. IF INCORPORATED, GIVE STATE OF INCORPORATION	9. DATE OF INCORPORATION	FILING DATE 7-27-99

10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) Dr. Michael D. Richardson University of Arkansas, Dept. of Horticulture 309 Plant Science Bldg., Fayetteville, Ark 72701		FILING AND EXAMINATION FEES: \$ 2450.00 DATE 7-27-99 CERTIFICATION FEE: \$ 432- DATE 3/31/2005
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11. TELEPHONE (include area code) (501)575-2860	12. FAX (include area code) (501)575-8619	13. E-MAIL mricha@comp.uark.edu	14. CROP KIND (Common Name) Tall Fescue
15. GENUS AND SPECIES NAME OF CROP Festuca arundinacea		16. FAMILY NAME (Botanical) Graminae	17. IS THE VARIETY A FIRST GENERATION HYBRID? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse) a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety d. <input type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$2,450), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)	19. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? See Section 83(a) of the Plant Variety Protection Act <input type="checkbox"/> YES (If "yes", answer items 20 and 21 below) <input checked="" type="checkbox"/> NO (If "no," go to item 22)
	20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> YES <input type="checkbox"/> NO
	21. IF "YES" TO ITEM 20, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? <input checked="" type="checkbox"/> FOUNDATION <input checked="" type="checkbox"/> REGISTERED <input checked="" type="checkbox"/> CERTIFIED

22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)	23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)
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24. The owners declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.
 The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.
 Owner(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF OWNER 	SIGNATURE OF OWNER
NAME (Please print or type) Michael D. Richardson, PhD	NAME (Please print or type)
CAPACITY OR TITLE Plant Breeder	DATE 07/11/99
CAPACITY OR TITLE	DATE

INSTRUCTIONS

9900368

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (*in the sense that it will reproduce an entire plant*) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$2,450 (\$300 filing fee and \$2,150 examination fee), payable to "Treasurer of the United States" (*See Section 97.6 of the Regulations and Rules of Practice.*) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfilled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 500, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$300 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office

Telephone: (301) 504-5518

FAX: (301) 504-5291

Homepage: <http://www.ams.usda.gov/science/pvp.htm>

ITEM

- 18a. Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) evidence of uniformity and stability; and (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
- (1) identify these varieties and state all differences objectively;
 - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
 - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness
- 18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
19. If "Yes" is specified (*seed of this variety be sold by variety name only, as a class of certified seed*), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (*See Regulations and Rules of Practice, Section 97.103.*)
22. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
23. See Section 5.5 of the Act for instructions on claiming the benefit of an earlier filing date.

22. CONTINUED FROM FRONT (*Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.*)

The first seed of TMI-RBR was sold on July 31, 1998

23. CONTINUED FROM FRONT (*Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).*)

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or reduction or any modification of owner's name is specified in Section 97.175 of the regulations. (*See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.*)

To avoid conflict with other variety names in use, the applicant must check the variety names proposed by contacting: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center-East, Beltsville, MD 20705. Telephone: (301) 504-8089.

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Officer, OIRM, AG Box 7630, Jamie L. Whitten Building, Washington, D.C. 20250. When replying, refer to OMB No. 0581-0055 and form number in your letter. Under the PRA of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

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S&T-470 (6-98) designed by the Plant Variety Protection Office with WordPerfect 6.0a. Replaces STD-470 (03-96) which is obsolete.

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Exhibit A**Origin and breeding history of TMI-RBR (Millennium) tall fescue**

TMI-RBR tall fescue (*Festuca arundinacea* Schreb.) is a moderately low-growing, turf-type tall fescue with a rich dark green color, medium fine leaf texture, and the ability to produce an attractive, medium-dense turf. Breeder seed of TMI-RBR tall fescue was harvested from 162 selected clones as the maternal parents. One-hundred ninety-six additional clones also served as pollen parents. This seed was used to establish an experimental foundation increase field in Oregon in the fall of 1996 and also included in the 1996 tall fescue turf trials sponsored by the National Turfgrass Evaluation Program.

The parental germplasm of TMI-RBR traces its origin to plants selected from old turfs of Georgia, Alabama, Mississippi, Missouri, Texas, Kentucky, Tennessee, Ohio, North Carolina, Pennsylvania, New Jersey, Maryland, Kansas, Idaho, and Virginia in addition to plants related to Rebel tall fescue (Funk et al., 1981). Selected plants were evaluated in spaced-plant nurseries and clonal evaluation trials conducted under conditions of frequent close mowing. This was followed by single plant progeny tests conducted as turf trials in stress environments with frequent close mowing often as close as 2 cm. After subjecting these progenies to the added stress of interplant competition, attractive plants were selected from the best performing progenies. These plants were evaluated in spaced-plant nurseries for improved stress tolerance, disease resistance, seed yield, and attractive appearance. Selected plants were grouped into similar phenotypes and reproductive maturities prior to moving to isolated crossing blocks. Progenies of plants with the best floret fertility were seeded to closely mowed turf trials to initiate additional cycles of selection.

Following varying cycles of selection, progenies of the components of many breeding populations were seeded in turf trials at Adelphia, NJ during 1989, 1990, and 1991. During the late summer of 1994, a total of 1400 plants were selected from 33 of the most attractive single-plant progeny plots in these turf trials. Selection was based on improved stress tolerance, disease resistance and overall turf performance records. All selections had medium-high density, a rich dark green color, and medium-low growth profile. Plants were established in an isolated spaced-plant nursery at Adelphia, NJ during the fall of 1994. Progressive roguing of this nursery during the growing season of 1995 and prior to anthesis in the spring of 1996 resulted in the removal of 1042 of the 1400 plants. Selections were based on an attractive dark green color, stress tolerance, seed yield potential, uniformity, and medium-low growth habit. Breeder seed was harvested from the 162 plants showing the best floret fertility during the summer of 1996. Plants selected originated from 13 separate breeding populations as shown in Table 1.

Millennium has been observed for three generations past breeder seed and has been found to be uniform and stable.

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No variants have been observed during seed increase.

Table 1.

Breeding Line	Plants harvested	Additional pollen plants
L-89	18	20
R-89	1	1
J-89	12	16
GH-90	2	2
A-88	28	35
ZVL-91	12	8
ZML-91	34	52
DFL-90	1	3
JBLD-90	14	16
HF-91	6	11
JB-90	6	4
LM-91	24	22
LJ-91	4	6
Totals	162	196

References

- Funk, C.R., R.E. Engel, W.K. Dickson, and R.H. Hurley. 1981. Registration of Rebel tall fescue. Crop Science 21:362

Exhibit B

Statement of Distinctness - The variety Millennium is a dark-green, high endophyte content variety of tall fescue that is well-adapted to the tall fescue growing regions of the United States. In extensive testing throughout the tall fescue growing regions, Millennium has proven to be one of the best turf-type tall fescues ever developed (Table 23). It has been shown to be tolerant of traffic (Table 25), low fertility (Table 27), close-mowing (Table 28), drought (Table 29), and a range of turfgrass diseases (Tables 33, 34, 35, and 36). The dark genetic color (Table 30) and fine leaf texture (Table 31) produce a very high quality turf in a range of situations. As a mature plant, this variety is noted by its semi-dwarf growth, a semi-erect growth habit (Table 4) and high number of reproductive panicles. 'Millennium' is most similar to 'Bonanza'; however, 'Millennium' has a shorter mature plant height [85 vs. 107 cm (OR, 1997) and 82 vs. 100 cm (OR, 1998)] than 'Bonanza'.

REPRODUCE LOCALLY. Include form number and date on all reproductions.

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Officer, OIRM, AG Box 7630, Jamie L. Whitten Building, Washington, D.C. 20250. When replying, refer to OMB No. 0581-0055 and form number in your letter. Under the PRA of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

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**U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY PROGRAM
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705**

**EXHIBIT C
(TALL & MEADOW FESCUES)**

**OBJECTIVE DESCRIPTION OF VARIETY
TALL & MEADOW FESCUES
(*Festuca* spp.)**

NAME OF APPLICANT(S) Turf Merchants, Inc.	TEMPORARY DESIGNATION TMI-RBR	VARIETY NAME Millennium
ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code) 33390 Tangent Loop Tangent, OR 97389	FOR OFFICIAL USE ONLY VPVO NUMBER 9900368	

Place the appropriate number that describes the varietal characteristics of this variety in the boxes below. Use leading zeroes when necessary (e.g. 089). Characteristics described, including numerical measurements, should represent those that are typical for the variety. Measured data should be for SPACED PLANTS. Royal Horticultural Society or any recognized color fan may be used to determine plant colors. Characteristics marked with an asterisk * are characteristics which should be recorded.

* 1. SPECIES: (With comparison varieties, use varieties within the species of the application variety)

 X 1 = *F. arundinacea* (Tall)

Turf Types

1 = Kentucky 31 2 = Rebel 3 = Olympic 4 = Bonanza 5 = Arid 6 = Rebel II
7 = Shortstop 8 = Silverado 9 = Rebel Jr. 10 = Mini Mustang 11 = Crewcut 12 = Bonsai

Forage Types

20 = Kentucky 31 21 = Martin 22 = Forager 23 = Mozark
24 = Kenhy 25 = AU Triumph 26 = Fawn 27 = Cajun

 2 = *F. pratensis* (Meadow)

30 = Admira 31 = Beaumont 32 = Comtessa 33 = Ensign 34 = Trader

* 2. CYTOLOGY:

 2n=42 Chromosome Number

3. ADAPTATION: (0 = Not Tested; 1 = Not Adapted; 2 = Adapted)

 2 Transition Zone 2 West 2 Northeast Other (Specify): _____

* 4. MATURITY: (Date First Headed, 10% of Panicle Emergence) - Table 1

 7 Maturity Class 1 = Very early () 2 = AU Triumph 3 = Early (Fawn) 4 = K31, Kenhy 5 = Medium (Rebel)

4. MATURITY: (continued)

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6 = Bonanza 7 = Late (Silverado) 8 = () 9 = Very late

Date Headed May 18 Location Tangent, Oregon

2 Days earlier than 12
 Maturity same as 8
2 Days later than 1 } Comparison Variety

* 5. MATURE PLANT HEIGHT CM: (Average of 100 culms * INTERNODE LENGTH CM: (First internode subtending the flag leaf)
 from crown to top of panicle, if panicle is nodding, straighten)

<p>Table 2</p> <p><u>83.6</u> cm Height</p> <p><u>32.0</u> cm Shorter than <u>1</u> Height same as <u>8</u> <u>9.8</u> cm Taller than <u>12</u> } Comparison Variety</p>	<p>Table 11</p> <p><u>14.8</u> cm Internode Length</p> <p><u>8.0</u> cm Shorter than <u>1</u> Length same as <u>9</u> <u>2.2</u> cm Longer than <u>12</u> } Comparison Variety</p>
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* HEIGHT AT EAR EMERGENCE CM: (Flag leaf height from crown to flag leaf collar) - Table 14

36.1 cm Height

23.8 cm Shorter than 1
 Height same as 8
5.6 cm Taller than 12 } Comparison Variety

* 6. GROWTH HABIT: (Mature Plants) - Table 4

7.0 1 = Prostrate () 3 = Semiprostrate () 5 = Horizontal ()
 7 = Semierect (Rebel) 9 = Erect (Mini Mustang)

* 7. RHIZOMES (Psuedo):

 mm Length X 1 = Absent () 2 = Rare (Rebel) 3 = Common ()

* 8. LEAF BLADE: (Tiller leaves/ turf color) Table 30

*6.9 Color: 1 = Light green () 3 = Medium light green () 5 = Green ()
 7 = Medium dark green () 9 = Very dark green ()

4.2 Specify rating of comparison variety = **Kentucky 31 (1)**

* 1 Anthocyanin: 1 = Absent () 9 = Present ()
 * 1 Basal Hairs: 1 = Absent () 9 = Present ()
 * 1 Margins: 1 = Smooth () 5 = Semi-rough () 9 = Rough ()

8. LEAF BLADE: (continued) - Table 31

6.4 Width Class: 1 = Very coarse () 3 = Coarse () 5 = Medium ()
 7 = Fine () 9 = Very Fine ()

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* TILLER LEAF LENGTH CM: (First leaf subtending the flag leaf)

* TILLER LEAF WIDTH MM:

Table 9	Table 10
<u>12.1</u> cm Tiller Leaf Length	<u>4.5</u> mm Tiller Leaf Width
<u>5.6</u> cm Shorter than <u>1</u>	<u>1.5</u> mm Narrower than <u>1</u>
Length same as <u>8</u>	Width same as <u>11</u>
<u>2.8</u> cm Longer than <u>12</u>	<u>1.0</u> mm Wider than <u>12</u>
} Comparison Variety	} Comparison Variety

FLAG LEAF LENGTH CM:

FLAG LEAF WIDTH MM:

Table 12	Table 13
<u>8.8</u> cm Flag Leaf Length	<u>3.5</u> mm Flag Leaf Width
<u>4.4</u> cm Shorter than <u>6</u>	<u>0.7</u> mm Narrower than <u>1</u>
Length same as <u>10</u>	Width same as <u>11</u>
<u>2.2</u> cm Longer than <u>12</u>	<u>1.1</u> mm Wider than <u>12</u>
} Comparison Variety	} Comparison Variety

* 9. LEAF SHEATH: (Basal Portion)

* 1 Anthocyanin (seedling): 1 = Absent (K31) 9 = Present ()
 * 1 Auricle Hairiness: 1 = Absent () 9 = Present ()

* 10. PANICLE: (At seed maturity except where noted.) Tables 5, 16, 17, 18, 21, 22

* 4.4 Shape: 1 = Narrow-tapering () 5 = Ovate () 7 = Oblong () 9 = Other specify)
 * 3.9 Type: 1 = Compact (appressed) 5 = Intermediate () 7 = Open () 9 = Other (specify)
 * 8.1 Orientation: 1 = Nodding () 9 = Erect ()
 * 1.7 Branch Pubescence: 1 = Glabrous () 9 = Pubescent ()
 * 1 Anther Color (At anthesis): 1 = Yellowish Green 2 = Green 3 = Bluish Green
 4 = Purplish 5 = Reddish 6 = Other (Specify)
 * 1.8 Glume Color (At anthesis): 1 = Yellowish Green 2 = Green 3 = Bluish Green
 4 = Purplish 5 = Reddish 6 = Other (Specify)

* 17.8 cm Panicle Length (from base to tip, if nodding, straighten; after anthesis)

<u>7.4</u> cm Shorter than <u>1</u>	}	Comparison Variety
Length same as <u>8</u>		
<u>4.5</u> cm Longer than <u>12</u>		

* 11. SEED: (With Lemma & Pelea) Table 8

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* 2600 ___ mg per 1000 seeds

___ 300 ___ mg Less than ___ 6 ___
 Weight same as ___ 7 ___
 ___ 400 ___ mg More than ___ 10 ___ } Comparison Variety

PALEA: (Keels or Margins)

___ 1 ___ Hairs: 1 = Absent () 5 = Short (Missouri 96) 9 = Long ()

LEMMA:

___ 1 ___ Hairs: 1 = Absent (Kenhy) 5 = Several () 9 = Many (Missouri 96)

___ . ___ mm Lemma Length (Mature)

___ . ___ mm Lemma Width

___ . ___ mm Shorter than ___
 Length same as ___
 ___ . ___ mm Longer than ___ } Comparison Variety

___ . ___ mm Narrower than ___
 Width same as ___
 ___ . ___ mm Wider than ___ } Comparison Variety

*AWNS: ___ 9 ___ AWNS: 1 = Absent () 9 = Present (Falcon) ___ 100 % Plants with awns

___ 1.11 mm Awn length (Of those present.) Table 5

___ .45 mm Shorter than ___ 12 ___
 Length same as ___ 1 ___
 ___ 0 mm Longer than ___ 0 ___ } Comparison Variety

12. DISEASE, INSECT, AND NEMATODE REACTION: (0= Not Tested 1= Least Resistant 9= Most Resistant)

___ 0 ___ Melting-out *Drechslera poae*

___ 0 ___ Blind Seed *Gloeotinia temulenta*

___ 8.7 ___ Leaf Spot *D. siccans* (Table 35)

___ 0 ___ Dollar Spot *Lanzia, Mollerdiscus* spp.

___ 0 ___ Net Blotch *D. dictyoides*

___ 0 ___ Stem Rust *Puccinia graminis*

___ 6.5 ___ Brown Patch *Rhizoctonia solani* (Table 34)

___ 0 ___ T. Blight *Typhula incarnata*

___ 0 ___ C. Leaf Spot *Cercospora fectucaae*

___ 3.0 ___ Pythium Blight *Pythium* spp. (Table 36)

___ 0 ___ Pink Snow Mold *Gerlachia nivalis*

___ 0 ___ Powdery Mildew *Erysiphe graminis*

___ 0 ___ Silver Top *F. tricinctum, F. roseum*

___ 0 ___ Crown Rust *Puccinia coronata*

___ 6.7 ___ Other Disease ___ Red_thread ___ (Table 33) _____

___ Other Insect _____

___ Other Nematode _____

13. ENVIRONMENTAL STRESS

Table 29

6.5 Drought Stress 1 = Susceptible () 5 = Tolerant () 9 = Resistant ()

13. ENVIRONMENTAL STRESS: (continued)

0 Shade Stress 1 = Susceptible () 5 = Tolerant () 9 = Resistant ()

0__ Winter Stress 1 = Susceptible () 5 = Tolerant () 9 = Resistant ()

14. GIVE VARIETY OR VARIETIES THAT MOST CLOSELY RESEMBLE THE APPLICATION VARIETY. For the following characteristics, indicate the degree of resemblance with the following scale:

1 = Application variety is less than comparison variety 2 = Same as 3 = More than, better, greater, darker, etc.

Character	Varieties	Rating	Character	Varieties	Rating
Leaf Width	8	2	Leaf Color	12	1
Panicle Color			Panicle Shape	12	2
Seed Size	8	3	Cold Injury		
Winter Color	1	2	Heat		
Disease					

* 15. EXPERIMENTAL: Give a brief summary of the experimental design utilized to collect the data used on this form. Cultural conditions, number of plants measured and plant spacing must be specified.

Data included for morphological comparisons were generated from a spaced planted nursery of individuals from cultivars cultivated at PickSeed West, Tangent, Oregon. The trial was established in November 1996 and again in November 1997. Both trials were arranged in a randomized complete block design with three replications. Each replication for an entry was represented by 20 individuals, planted into a single row at 24 inches apart within the row. Plant nutrition was 35 pounds of N per acre at transplanting time and again in October 1997. Additionally, 90 pounds N per acre was split applied in the spring of each year, with one-half in March and the other half in April.

Data regarding turf performance were collected as part of a multi-location trial conducted by the National Turfgrass Evaluation Program. This trial was planted in the fall of 1996.

Table 1. Heading date of several tall fescues grown near Tangent, Oregon.

Variety	Heading Date (Julian)		
	1996-97	1997-98	Avg.
Bonsai	134.5	144.6	139.6
Bonanza	132.6	143.9	138.3
Millennium	132.3	142.7	137.5
Silverado	131.4	143.5	137.5
Shortstop	132.3	141.9	137.1
Rebel Jr.	131.7	142.2	137.0
Crewcut	131.0	142.8	136.9
Mini-Mustang	131.6	140.8	136.2
Rebel II	130.1	141.4	135.8
KY-31 (E+)	129.8	141.7	135.8
LSD (0.05)	1.7	2.0	

Table 2. Plant height of several tall fescues planted grown near Tangent, Oregon.

Variety	Plant Height (cm)		
	1996-97	1997-98	Avg.
KY-31 (E+)	125.5	105.6	115.6
Bonanza	106.8	100.5	103.7
Rebel II	109.2	96.0	102.6
Shortstop	99.9	90.0	95.0
Crewcut	102.8	85.0	93.9
Mini-Mustang	90.4	89.1	89.8
Rebel Jr.	90.9	85.2	88.1
Silverado	93.1	77.6	85.4
Millennium	84.7	82.4	83.6
Bonsai	74.2	73.3	73.8
LSD (0.05)	10.1	11.1	

Table 3. Genetic color of several tall fescues grown near Tangent, Oregon.

Variety	Genetic color †		
	1996-97	1997-98	Avg.
Bonsai	7.3	7.3	7.3
Millennium	5.7	6.3	6.0
Mini-Mustang	6.3	5.3	5.8
Crewcut	6.0	5.3	5.7
Rebel Jr.	6.0	5.3	5.7
Silverado	6.3	5.0	5.7
Shortstop	6.0	5.0	5.5
Bonanza	5.3	4.3	4.8
Rebel II	5.3	3.7	4.5
KY-31 (E+)	2.3	1.7	2.0
LSD (0.05)	0.8	1.0	

† - color ratings from 1-9 with 1 = light green and 9 = very dark green

Table 4. Growth habit of several tall fescues grown near Tangent, Oregon.

Variety	Growth habit		
	1996-97	1997-98	Avg.
Crewcut	8.7	nd	8.7
Bonanza	8.3	nd	8.3
Mini-Mustang	8.0	nd	8
Shortstop	8.0	nd	8
Rebel Jr.	7.7	nd	7.7
Silverado	7.7	nd	7.7
Bonsai	7.3	nd	7.3
Millennium	7.0	nd	7
KY-31 (E+)	6.3	nd	6.3
Rebel II	6.0	nd	6
LSD (0.05)	1.0		

†† growth habit ratings from 1-9 with 1 = prostrate, 3 = semi-prostrate, 5 = horizontal, 7 = semi-erect, and 9 = erect.

nd - this data was not collected in the 1997-98 growing season

Table 5. Glume color and awn length of several tall fescues grown near Tangent, Oregon during the 1996-97 growing season. No data was collected for either of these parameters in 1997-98.

Variety	Glume Color †	Awn length (mm)
Bonanza	1.7	1.26
Bonsai	2.0	1.56
Crewcut	1.6	1.40
KY-31 (E+)	1.5	1.14
Millennium	1.8	1.11
Mini-Mustang	1.7	1.16
Rebel II	1.8	1.38
Rebel Jr.	1.5	1.29
Silverado	1.8	1.15
Shortstop	1.9	1.26
LSD (0.05)	0.3	0.27

† - color ratings from 1-3 with 1 = light yellowish-green, 2 = med-dark and 3 = purplish, glume color was not scored the second year

Table 6. Seed length of several tall fescues grown near Tangent, Oregon.

Variety	Seed length (mm)		
	1996-97	1997-98	Avg.
Bonanza	5.7	6.9	6.3
Rebel II	5.7	6.9	6.3
KY-31 (E+)	5.6	6.8	6.2
Shortstop	5.6	6.7	6.2
Bonsai	5.3	6.9	6.1
Crewcut	5.2	6.9	6.1
Silverado	5.5	6.2	5.9
Rebel Jr.	5.3	6.2	5.8
Millennium	5.2	6.3	5.8
Mini-Mustang	5.2	6.2	5.7
LSD (0.05)	0.4	0.6	

† - color ratings from 1-9 with 1 = light green and 9 = very dark green

Table 7. 10-seed width of several tall fescues grown near Tangent, Oregon.

Variety	10-seed width (mm)		
	1996-97	1997-98	Avg.
KY-31 (E+)	14.7	14.0	14.4
Shortstop	15.2	13.5	14.4
Rebel II	14.7	13.7	14.2
Rebel Jr.	14.2	13.8	14.0
Millennium	14.5	13.3	13.9
Bonanza	13.8	13.5	13.7
Mini-Mustang	13.8	13.0	13.4
Silverado	13.8	13.0	13.4
Bonsai	13.3	12.5	12.9
Crewcut	13.8	10.3	12.1
LSD (0.05)	1.2	2.1	

Table 8. 1000-seed weight of several tall fescues grown near Tangent, Oregon.

Variety	1000-seed weight (g)		
	1996-97	1997-98	Avg.
Rebel II	3.0	2.7	2.9
Bonanza	2.8	2.5	2.7
KY-31 (E+)	2.8	2.6	2.7
Shortstop	2.9	2.4	2.7
Millennium	2.8	2.3	2.6
Rebel Jr.	2.7	2.3	2.5
Crewcut	2.7	2.2	2.5
Silverado	2.6	1.9	2.3
Bonsai	2.3	2.2	2.3
Mini-Mustang	2.3	2.1	2.2
LSD (0.05)	0.3	0.3	

Table 9. Tiller leaf length (cm) of several tall fescues grown near Tangent, Oregon.

Variety	Tiller-leaf length (cm)		
	1996-97	1997-98	Avg.
KY-31 (E+)	21.0	14.3	17.7
Rebel II	20.1	15.2	17.7
Bonanza	19.9	11.7	15.8
Shortstop	17.2	13.1	15.2
Rebel Jr.	16.7	13.0	14.9
Crewcut	18.1	11.2	14.7
Mini-Mustang	15.8	11.9	13.9
Silverado	16.9	10.7	13.8
Millennium	13.5	10.6	12.1
Bonsai	10.3	8.2	9.3
LSD (0.05)	2.9	3.3	

Table 10. Tiller leaf width (mm) of several tall fescues grown near Tangent, Oregon.

Variety	Tiller-leaf width (mm)		
	1996-97	1997-98	Avg.
KY-31 (E+)	6.9	5.0	6.0
Rebel II	5.6	5.5	5.6
Bonanza	5.6	5.0	5.3
Shortstop	5.5	4.1	4.8
Silverado	5.5	3.9	4.7
Rebel Jr.	5.0	4.2	4.6
Millennium	4.8	4.2	4.5
Crewcut	4.9	4.1	4.5
Mini-Mustang	4.6	4.0	4.3
Bonsai	3.3	3.7	3.5
LSD (0.05)	0.9	0.8	

Table 13. Flag-leaf width (mm) of several tall fescues grown near Tangent, Oregon.

Variety	Flag-leaf width (mm)		
	1996-97	1997-98	Avg.
KY-31 (E+)	4.8	3.5	4.2
Rebel II	3.8	3.9	3.9
Bonanza	3.9	3.9	3.9
Shortstop	4.1	3.5	3.8
Silverado	3.9	3.1	3.5
Rebel Jr.	3.5	3.4	3.5
Crewcut	3.5	3.4	3.5
Millennium	3.8	3.2	3.5
Mini-Mustang	3.2	2.8	3.0
Bonsai	2.1	2.6	2.4
LSD (0.05)	1.0	0.9	

Table 14. Flag-leaf height (cm) of several tall fescues grown near Tangent, Oregon.

Variety	Flag-leaf height (cm)		
	1996-97	1997-98	Avg.
KY-31 (E+)	66.2	53.5	59.9
Bonanza	48.5	49.7	49.1
Rebel II	52.3	45.3	48.8
Shortstop	42.4	42.7	42.6
Crewcut	44.9	37.7	41.3
Mini-Mustang	37.7	41.5	39.6
Rebel Jr.	38.2	40.5	39.4
Silverado	40.9	34.4	37.7
Millennium	37.0	35.2	36.1
Bonsai	29.2	31.7	30.5
LSD (0.05)	5.9	8.2	

Table 11. Internode length (cm) of several tall fescues grown near Tangent, Oregon.

Variety	Internode length (cm)		
	1996-97	1997-98	Avg.
KY-31 (E+)	24.0	21.5	22.8
Rebel II	18.7	18.2	18.5
Bonanza	18.0	18.5	18.3
Shortstop	16.0	16.5	16.3
Crewcut	17.2	14.8	16.0
Silverado	16.4	13.7	15.1
Rebel Jr.	14.6	15.4	15.0
Millennium	15.1	14.4	14.8
Mini-Mustang	12.9	15.7	14.3
Bonsai	11.7	13.4	12.6
LSD (0.05)	2.7	3.0	

Table 12. Flag-leaf length (cm) of several tall fescues grown near Tangent, Oregon.

Variety	Flag-leaf length (cm)		
	1996-97	1997-98	Avg.
Rebel II	15.8	10.5	13.2
Bonanza	15.2	10.1	12.7
KY-31 (E+)	14.4	9.8	12.1
Shortstop	12.9	8.7	10.8
Rebel Jr.	12.6	8.8	10.7
Crewcut	13.6	7.7	10.7
Silverado	12.1	7.4	9.8
Mini-Mustang	12.0	7.6	9.8
Millennium	10.2	7.4	8.8
Bonsai	7.6	5.5	6.6
LSD (0.05)	1.9	2.0	

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Table 15. Branch pubescence of several tall fescues planted near Tangent, Oregon in the fall of 1996 - 1997 data

Variety	Branch † Pubescence
Silverado	2.27
KY-31 (E+)	2.13
Mini-Mustang	2.13
Bonanza	2.03
Crewcut	2.03
Shortstop	2.00
Rebel II	1.93
Bonsai	1.83
Millennium	1.70
Rebel Jr.	1.63
LSD (0.05)	0.35

† - branch pubescence ranked from 1-3 with 1 = smooth, 2 = intermediate, and 3 = rough

Table 16. Panicle shape of several tall fescues grown near Tangent, Oregon.

Variety	Panicle shape †		
	1996-97	1997-98	Avg.
Bonanza	5.4	4.7	5.1
Mini-Mustang	5.3	4.3	4.8
Rebel II	5.1	4.2	4.7
KY-31 (E+)	5.1	3.9	4.5
Shortstop	5.0	4.0	4.5
Rebel Jr.	5.1	3.8	4.5
Bonsai	4.9	3.8	4.4
Crewcut	5.2	3.5	4.4
Silverado	5.0	3.6	4.3
Millennium	4.9	3.8	4.4
LSD (0.05)	0.4	0.9	

† - panicle shape; 1=narrow tapering, 5=ovate, 7=oblong, 9=other

Table 17. Panicle orientation of several tall fescues grown near Tangent, Oregon.

Variety	Panicle orientation ††		
	1996-97	1997-98	Avg.
Bonsai	8.1	8.3	8.2
Millennium	8.2	8.0	8.1
Rebel Jr.	7.3	8.0	7.7
Shortstop	6.9	8.1	7.5
Silverado	6.5	8.4	7.5
Mini-Mustang	5.9	8.0	7.0
Crewcut	6.1	7.9	7.0
Bonanza	5.3	6.9	6.1
Rebel II	5.1	6.8	6.0
KY-31 (E+)	4.1	7.6	5.9
LSD (0.05)	1.4	0.9	

†† - panicle orientation; 1=nodding, 5 = intermediate, 9=erect

Table 18. Panicle length (cm) of several tall fescues grown near Tangent, Oregon.

Variety	Panicle length (cm)		
	1996-97	1997-98	Avg.
KY-31 (E+)	26.9	23.4	25.2
Bonanza	24.9	24.0	24.5
Rebel II	23.4	21.7	22.6
Shortstop	21.4	20.4	20.9
Rebel Jr.	20.9	20.2	20.6
Crewcut	22.5	18.7	20.6
Mini-Mustang	19.7	19.3	19.5
Silverado	19.0	18.1	18.6
Millennium	17.8	17.7	17.8
Bonsai	13.2	13.4	13.3
LSD (0.05)	2.0	3.4	

Table 19. Panicle Branch number (lowest whorl) of several tall fescues grown near Tangent, Oregon.

Variety	Panicle Branch Number (lowest whorl)		
	1996-97	1997-98	Avg.
Rebel Jr.	1.92	1.90	1.91
Bonanza	1.87	1.92	1.90
Rebel II	1.82	1.92	1.87
Mini-Mustang	1.90	1.77	1.84
Crewcut	1.88	1.78	1.83
KY-31 (E+)	1.88	1.78	1.83
Millennium	1.75	1.77	1.76
Silverado	1.80	1.72	1.76
Shortstop	1.78	1.31	1.55
Bonsai	1.60	1.45	1.53
LSD (0.05)	0.18	0.39	

Table 20. Panicle type of several tall fescues grown near Tangent, Oregon.

Variety	Panicle type †		
	1996-97	1997-98	Avg.
Bonanza	5.6	3.7	4.7
KY-31 (E+)	5.7	3.4	4.6
Mini-Mustang	5.5	3.4	4.5
Crewcut	5.4	3.1	4.3
Rebel Jr.	5.2	3.1	4.2
Rebel II	5.4	2.8	4.1
Shortstop	5.3	2.9	4.1
Silverado	5.3	2.7	4.0
Millennium	5.0	2.7	3.9
Bonsai	4.9	2.7	3.8
LSD (0.05)	0.5	1.0	

† -panicle type; 1=compact, 5=intermediate, 7=open, 9=other

Table 21. Anther color of several tall fescues planted near Tangent, Oregon in the fall of 1996 - 1997 data

Variety	Yellowish-Green	Green	Bluish-green	Purplish	Reddish	Other
	----- % -----					
Millennium	97	0	0	3	0	0
Bonanza	95	3	0	2	0	0
Bonsai	97	0	0	3	0	0
Crewcut	100	0	0	0	0	0
KY-31 (E+)	100	0	0	0	0	0
Mini-Mustang	98	2	0	0	0	0
Rebel II	100	0	0	0	0	0
Rebel Jr.	100	0	0	0	0	0
Silverado	98	0	0	2	0	0
Shortstop	95	0	0	5	0	0

Table 22. Anther color of several tall fescues planted near Tangent, Oregon in the fall of 1997 - 1998 data

Variety	Yellowish-Green	Green	Bluish-green	Purplish	Reddish	Other
	----- % -----					
Millennium	96	4	0	0	0	0
Bonanza	94	6	0	0	0	0
Bonsai	97	3	0	0	0	0
Crewcut	97	3	0	0	0	0
KY-31 (E+)	97	3	0	0	0	0
Mini-Mustang	99	1	0	0	0	0
Rebel II	95	5	0	0	0	0
Rebel Jr.	95	5	0	0	0	0
Silverado	97	3	0	0	0	0
Shortstop	97	3	0	0	0	0

TABLE 25. GENETIC COLOR RATINGS OF TALL FESCUE CULTIVARS 1/
1998 DATA

GENETIC COLOR RATINGS 1-9; 9=DARK GREEN 2/

NAME	AR1	CA1	CA3	DE1	GA1	IA1	IL1	IL2	IN1	KS2	KY1	MD1	MI1	MO1	MO3	MS1	NE1	NE2	NJ1	NJ2	NY1	OH1	OK1	SC2	UT1	VA1	VA4	VA1	MEAN	
MB 213	8.0	7.0	7.7	5.0	8.7	6.7	5.7	8.0	7.0	8.3	9.0	7.0	7.3	7.0	8.3	7.0	8.0	8.3	7.3	5.3	7.7	8.3	7.0	6.3	6.3	6.0	7.0	8.7	7.3	
MB 214	8.7	7.0	7.7	5.3	7.7	7.3	6.0	7.7	6.3	8.0	9.0	7.3	7.0	6.7	8.0	7.3	7.7	7.3	7.0	5.3	8.0	8.3	7.0	6.7	6.7	6.7	7.0	8.3	7.3	
MB 29	7.3	7.0	7.0	5.3	7.3	6.7	5.3	6.7	7.0	8.3	9.0	6.7	7.7	6.3	8.7	7.3	7.3	8.0	7.7	5.3	8.0	8.7	7.0	6.7	6.3	7.0	6.7	8.3	7.2	
MB 28	8.3	7.0	7.3	4.5	7.7	7.0	6.0	7.7	6.7	7.3	9.0	7.3	7.3	6.7	8.0	7.3	7.3	8.0	6.3	4.7	7.7	8.7	7.0	7.0	7.0	6.0	6.3	8.0	7.1	
MB 26	7.0	7.0	7.3	5.3	8.0	6.0	5.7	7.7	6.7	7.3	9.0	7.0	7.3	6.7	8.3	7.3	7.3	8.0	7.3	5.0	7.3	8.7	7.0	7.0	6.7	6.0	6.7	8.7	7.1	
REBEL 2000 (AA-989)	8.0	7.0	7.0	4.3	8.0	7.0	5.3	6.7	6.3	7.3	9.0	7.0	7.0	6.7	8.3	7.3	7.0	8.3	7.0	6.0	8.0	8.0	7.0	7.0	7.3	5.7	6.3	9.0	7.1	
ZPS-5LZ	7.3	7.0	7.7	4.7	8.3	7.0	5.7	7.7	6.0	8.3	9.0	7.0	7.0	6.7	8.0	7.0	7.3	8.3	7.7	5.0	7.3	8.0	7.0	6.3	7.3	6.3	6.7	8.3	7.1	
MB 215	7.3	7.0	7.7	5.3	8.3	7.0	5.7	7.7	6.0	7.7	9.0	7.0	7.0	6.7	8.0	7.0	7.3	8.3	7.7	4.7	7.7	8.0	7.0	6.7	7.0	6.3	6.7	7.7	7.1	
BAR FA6D USA	8.0	7.0	7.0	4.7	8.0	7.0	5.7	5.7	6.3	7.7	9.0	7.0	8.0	6.3	7.7	7.0	8.0	7.3	6.7	5.0	7.7	8.0	7.0	6.7	7.7	7.0	7.0	8.7	7.0	
SHENANDOAH II (WRS2)	8.3	7.0	7.0	5.3	7.7	7.0	5.0	6.3	7.0	8.0	9.0	7.0	7.0	6.0	8.3	7.0	8.0	8.0	6.0	5.0	7.3	8.0	7.0	6.7	6.7	7.0	6.3	8.3	7.0	
MB 216	8.0	7.0	7.7	5.3	8.0	7.7	5.3	6.7	6.3	7.7	9.0	7.3	6.3	6.3	8.7	7.0	7.7	7.7	6.7	4.3	6.7	8.0	7.0	6.3	6.7	6.7	7.0	8.3	7.0	
PICK FA N-93	7.0	7.0	7.0	4.7	8.3	6.0	5.3	7.3	6.7	8.0	9.0	7.0	6.0	7.0	8.3	7.0	7.7	7.7	8.3	5.0	7.0	8.0	7.0	6.3	6.7	6.0	6.7	8.3	7.0	
BAR FA6 US1	7.3	7.0	7.0	5.0	9.0	6.3	5.3	6.3	7.0	7.0	9.0	7.3	7.0	7.0	7.0	7.3	7.0	8.0	7.3	4.7	8.0	8.3	7.0	6.3	6.7	6.0	6.7	8.3	7.0	
EA 41	8.7	7.0	7.7	4.7	8.0	6.7	6.0	6.7	6.7	7.7	8.7	7.0	7.0	6.3	8.0	7.0	7.3	7.7	7.0	5.0	7.3	8.0	7.0	6.0	5.7	7.0	6.7	8.3	7.0	
ARABIA (J-5)	6.7	7.0	7.3	4.3	7.7	7.0	5.3	7.7	6.3	7.3	9.0	7.0	6.3	7.0	7.7	7.0	7.3	7.0	7.3	7.0	5.0	7.3	8.0	7.0	6.0	5.7	7.0	6.7	8.3	7.0
BAR FA6 US3	7.3	7.0	7.0	4.7	8.7	5.7	5.3	7.7	6.3	7.3	9.0	7.0	6.7	6.7	7.3	7.0	7.3	7.0	7.0	7.3	5.3	7.0	8.3	7.0	6.3	6.7	6.7	8.3	7.0	
BAR FA6 US2U	7.0	7.0	7.0	5.0	8.0	6.7	5.7	7.3	6.3	7.3	9.0	7.0	6.7	6.3	7.7	7.3	7.3	7.7	6.7	5.0	7.0	8.0	7.0	6.3	6.0	6.3	6.7	8.3	7.0	
MILLENNIUM (TMI-RBR)	7.3	7.0	7.0	5.0	8.7	6.7	5.0	6.7	6.0	7.0	9.0	7.0	7.3	6.3	8.3	7.3	7.0	8.0	6.7	5.3	7.0	8.0	7.0	6.0	6.3	6.0	6.7	8.3	6.9	
PICK FA 6-91	6.3	6.7	7.7	5.0	8.3	5.0	5.7	7.3	6.0	7.3	9.0	6.7	6.7	6.0	8.0	7.0	7.3	7.3	8.0	4.7	7.7	8.3	7.3	6.7	6.3	5.3	6.3	8.3	6.9	
COYOTE	8.3	7.0	7.0	4.0	7.7	4.0	7.7	6.7	6.0	7.0	9.0	7.0	6.7	6.3	8.0	7.0	7.3	7.3	7.0	5.0	7.0	8.0	7.0	6.7	6.0	5.3	6.0	8.0	6.9	
MB 212	8.3	7.0	7.0	4.0	7.7	7.0	5.3	6.7	6.7	7.7	9.0	7.0	6.7	5.7	8.0	7.0	7.3	8.0	7.0	4.7	7.7	8.0	7.0	6.3	7.0	5.3	6.0	8.0	6.9	
PLANTATION (PENNINGTON-1901)	8.7	7.0	7.0	4.0	8.7	7.0	5.3	6.3	6.0	8.3	9.0	6.7	7.3	6.3	8.0	7.3	7.3	8.0	5.7	4.7	7.0	8.0	7.0	6.3	7.0	5.3	6.3	8.0	6.9	
VELOCITY (AA-983)	7.7	7.0	7.0	5.0	8.0	6.7	5.7	6.0	6.0	7.7	9.0	7.0	7.0	6.3	7.7	7.0	7.3	8.0	6.3	5.0	7.0	8.0	7.0	6.7	6.7	6.0	7.0	8.0	6.9	
MB 211	7.7	7.0	7.0	5.7	8.0	6.3	5.0	6.7	6.3	7.3	9.0	6.7	6.7	6.0	7.0	7.0	7.7	7.7	6.7	5.0	7.3	8.0	7.0	6.3	7.0	6.0	6.3	7.7	6.9	
ARID 3 (J-98)	7.0	7.0	7.0	4.3	8.0	6.0	5.0	5.0	6.3	7.3	9.0	7.0	6.7	7.0	8.3	7.0	7.7	7.7	7.7	5.3	7.3	8.0	7.0	6.7	7.0	6.0	6.7	7.7	6.9	
PICK FA 20-92	7.3	7.0	7.0	4.5	7.7	6.7	5.3	7.7	6.3	7.7	9.0	7.0	6.7	5.7	8.0	7.0	7.0	7.7	7.7	7.0	5.3	6.7	8.3	6.7	6.7	6.0	6.7	8.0	6.9	
ARID 2 (J-3)	5.7	7.0	7.0	5.3	7.7	6.7	5.7	6.3	6.0	7.7	9.0	7.0	6.0	6.3	7.7	7.0	7.7	7.7	6.7	5.0	7.3	8.0	7.0	7.0	7.7	6.3	7.0	7.7	6.9	
OFI-951	6.0	7.0	7.0	5.0	7.7	6.3	5.3	7.0	6.3	6.0	9.0	6.7	6.0	6.3	8.0	7.0	7.3	7.3	6.7	4.7	7.3	8.0	7.0	6.0	6.3	6.0	6.7	8.3	6.9	
PICK FA 15-92	5.7	7.0	7.0	4.3	8.0	6.7	5.3	6.7	6.0	6.7	9.0	7.0	7.3	6.3	8.0	7.0	7.3	7.3	7.3	5.0	7.7	8.3	7.0	6.7	6.3	6.0	6.7	8.3	6.9	
REBEL SENTRY (AA-A91)	7.7	7.0	7.0	5.0	8.0	6.0	5.7	6.7	6.0	8.0	9.0	7.0	6.3	6.0	7.7	7.0	7.3	8.0	6.3	5.0	7.0	7.7	7.0	6.7	6.3	6.0	7.0	8.0	6.8	
SCORPION (ZPS-2PTF)	6.0	7.3	7.0	5.0	8.3	7.0	5.0	6.0	6.3	7.3	9.0	7.7	6.7	6.3	7.7	7.0	7.0	7.7	7.7	5.7	4.7	6.7	8.0	7.0	6.3	7.0	6.7	8.3	6.8	
PICK FA UT-93	6.0	7.0	7.0	5.0	8.0	5.7	5.0	7.3	6.0	8.0	9.0	6.7	6.7	6.3	7.7	6.7	7.0	7.3	7.3	4.3	7.0	9.0	7.0	6.3	7.3	6.0	7.0	8.0	6.8	
BRANDY (J-101)	5.0	7.0	7.0	5.0	8.0	7.0	5.0	8.0	6.3	7.0	9.0	7.0	6.7	6.0	8.3	7.0	7.7	8.0	6.0	5.0	7.3	8.0	6.7	6.7	6.3	5.7	7.0	7.3	6.8	
BAR FA6 US6F	6.3	7.3	7.3	4.7	7.0	7.0	5.3	6.0	6.3	7.3	9.0	7.0	7.0	6.3	8.0	7.0	7.3	7.3	5.3	5.0	7.0	8.0	7.0	6.7	7.3	6.3	6.7	7.7	6.8	
BAR FA 6LV	7.3	7.0	7.0	5.0	8.0	5.7	5.3	7.3	6.3	7.7	8.7	7.7	6.5	5.7	8.0	7.0	7.3	7.3	7.3	5.7	5.3	7.0	8.0	7.0	6.3	6.3	7.0	8.0	6.8	
CORONADO GOLD (PST-5RT)	7.0	7.3	7.0	4.3	7.7	6.3	5.0	7.3	6.0	7.3	9.0	6.7	7.3	6.0	8.0	7.0	7.3	7.3	6.0	4.3	7.3	8.0	6.3	6.0	6.3	6.3	7.0	8.0	6.8	
CORONADO	7.0	7.3	7.0	4.7	7.0	6.7	5.0	6.7	6.0	7.3	9.0	6.0	6.7	5.7	8.0	7.0	7.0	7.7	6.7	5.0	7.0	8.0	7.0	6.7	7.0	5.7	6.7	7.7	6.8	
SUNPRO	6.0	7.3	7.0	5.3	7.3	6.3	5.0	5.7	6.3	7.7	9.0	6.7	7.0	6.3	7.3	7.0	7.0	7.7	6.3	4.7	6.7	8.0	6.7	6.3	7.0	5.7	6.7	8.7	6.8	
PICK FA XK-95	7.3	7.0	7.3	5.0	7.3	7.0	5.0	5.7	6.3	7.3	8.7	6.3	7.0	6.0	7.3	7.0	7.0	7.7	6.0	4.3	7.3	8.0	7.0	7.0	5.7	6.0	6.3	8.3	6.7	
CROSSFIRE II	7.3	7.0	6.7	5.0	7.0	7.0	5.0	5.7	6.0	7.0	8.7	7.0	7.3	6.0	8.0	7.3	7.3	7.7	6.3	4.7	8.0	7.7	7.0	6.3	6.3	5.3	6.0	7.7	6.7	
SHORTSTOP II	6.0	7.0	7.0	5.0	7.7	6.0	5.0	5.7	5.7	7.3	9.0	7.3	6.0	6.0	8.0	7.0	7.3	8.0	7.0	4.3	7.7	8.0	6.7	6.3	7.0	5.7	7.0	8.0	6.7	
OFI-96-31	7.0	7.0	7.0	4.7	8.0	5.3	5.0	5.3	6.0	7.7	9.0	6.3	7.0	6.0	8.0	7.0	7.7	7.7	6.0	5.0	7.3	7.7	7.0	6.3	6.0	6.0	6.7	8.3	6.7	
GAZELLE	6.3	7.3	7.0	4.7	8.3	6.0	5.3	6.7	6.0	7.0	9.0	7.3	6.3	6.3	7.0	7.0	7.7	7.3	7.0	5.0	7.0	8.3	6.0	6.7	6.3	5.0	6.0	8.0	6.7	
REMBRANDT (LTP-4026 E+)	7.3	7.0	7.0	4.7	7.7	7.0	6.0	5.3	6.0	7.0	9.0	6.7	6.0	6.0	7.7	7.0	7.0	7.7	6.0	4.3	8.0	8.0	6.7	6.7	6.3	5.7	6.3	7.3	7.3	

Table 30

9900368

2.2

TABLE 25. (CONT'D)

GENETIC COLOR RATINGS OF TALL FESCUE CULTIVARS
1998 DATA

GENETIC COLOR RATINGS 1-9; 9=DARK GREEN

NAME	AR1	CA1	CA3	DE1	GA1	IA1	IL1	IL2	IM1	KS2	KY1	MD1	MI1	MO1	MS1	NE1	NE2	NJ1	NJ2	NY1	OH1	OK1	SC2	UT1	VA1	VA4	WA1	MEAN	
CUP501T	7.0	7.0	7.0	4.7	7.3	7.0	5.0	5.3	6.0	7.0	8.7	6.3	6.7	5.7	8.0	7.0	7.7	7.7	5.0	5.3	7.3	8.0	6.7	6.3	6.7	6.7	6.3	7.7	6.7
TWILIGHT II (TMI-TW)	5.7	7.0	7.3	4.7	8.0	7.0	5.3	5.0	6.0	7.3	9.0	7.0	6.0	6.0	7.3	7.0	7.3	7.0	6.3	4.3	7.3	7.7	7.0	6.7	6.7	6.3	6.7	8.0	6.7
GENESIS	7.3	7.0	6.3	5.3	7.7	7.0	5.3	5.0	6.0	7.0	8.7	6.3	5.7	7.0	7.3	7.3	7.7	5.3	5.3	4.0	7.7	7.7	6.7	6.3	7.3	6.7	6.3	8.0	6.7
OFI-931	6.7	7.0	7.0	4.7	7.3	6.7	5.7	5.3	6.3	7.7	9.0	7.3	6.3	5.3	8.0	7.0	8.0	7.7	4.7	4.3	7.0	7.7	7.0	6.7	6.3	5.3	6.3	8.3	6.7
BAR FA 60	7.3	7.0	7.0	5.0	7.0	6.3	5.0	5.7	6.0	7.0	9.0	7.0	6.3	6.0	8.0	7.0	7.0	7.3	6.7	5.0	6.7	8.0	7.0	6.3	7.3	6.3	6.7	8.0	6.7
PICK RT-95	6.7	7.0	7.0	4.5	7.3	6.3	5.0	6.0	6.0	7.0	9.0	6.7	7.3	6.0	7.3	7.0	7.3	7.7	5.0	4.0	7.3	8.0	6.3	6.3	7.3	6.0	6.0	8.0	6.6
ISI-TF10	6.3	7.0	6.7	4.0	7.0	7.0	5.3	6.0	6.0	7.0	9.0	6.7	7.3	6.0	7.3	7.0	7.3	8.0	6.0	4.3	7.0	8.0	6.3	6.3	5.7	5.7	6.3	7.7	6.6
MASTERPIECE (LTP-SD-TF)	7.0	7.0	7.0	4.0	7.3	7.0	5.3	5.7	6.0	7.0	8.7	6.7	7.3	5.7	8.0	7.0	7.0	8.3	6.3	4.0	7.3	8.0	6.7	6.0	6.3	6.3	7.0	7.7	6.6
BRAVO (RG-93)	6.3	7.3	7.0	4.5	7.3	6.7	5.3	5.7	6.0	7.7	9.0	6.3	6.7	5.3	7.7	7.0	7.0	7.7	5.7	4.7	6.7	8.0	6.3	6.3	6.3	6.0	7.0	8.3	6.6
LION	7.0	7.0	7.0	4.3	7.0	6.3	5.0	6.0	6.3	7.0	8.7	6.7	6.7	6.3	7.3	7.0	7.3	7.0	6.0	4.0	7.0	8.0	6.7	6.3	6.0	7.0	6.7	7.7	6.6
OLYMPIC GOLD (PST-5E5)	5.3	7.0	7.0	4.7	7.3	6.7	5.3	7.0	6.0	7.3	8.7	7.3	7.3	5.3	7.3	7.0	7.3	7.3	6.3	4.3	7.3	8.0	6.7	6.3	6.0	5.3	6.0	8.0	6.6
ALAMO E	7.7	7.0	7.0	4.7	7.7	7.0	5.3	6.0	6.0	6.7	9.0	7.0	7.3	6.0	7.3	7.0	6.7	7.0	6.3	4.3	7.3	8.0	6.7	6.3	6.0	5.3	6.0	8.0	6.6
BULLDAWG (PICK GA-96)	7.0	7.0	6.7	5.0	8.0	7.0	5.0	5.3	6.3	7.0	9.0	6.0	6.7	6.0	8.3	7.0	7.0	7.7	5.3	3.7	6.7	8.0	6.7	6.3	7.0	5.3	6.3	8.0	6.6
PST-3M5	7.7	7.0	7.0	4.7	7.7	7.0	5.0	5.3	6.0	7.3	8.7	6.3	6.7	5.7	7.7	7.0	7.3	7.3	5.0	5.0	7.3	7.7	6.7	5.7	7.0	5.3	6.0	7.7	6.6
WATCHDOG (PICK FA B-93)	6.7	7.0	6.3	4.3	7.7	6.7	5.0	5.0	6.0	7.3	8.7	6.3	7.0	5.7	7.0	7.0	7.3	7.3	5.3	5.3	6.7	8.3	6.7	5.7	6.3	6.0	7.7	6.6	6.6
CHAPEL HILL (TA-7)	5.3	7.3	6.7	4.7	7.7	7.0	5.0	5.3	6.0	7.0	8.7	6.0	6.3	5.7	7.0	7.0	7.3	7.3	5.0	4.3	6.3	8.0	6.7	6.7	7.0	5.7	6.0	7.7	6.6
TAR HEEL	5.7	7.0	7.0	4.7	7.3	6.3	5.0	4.7	6.0	7.0	9.0	6.3	6.7	5.7	7.3	7.0	7.3	7.3	5.0	4.7	6.7	8.0	6.7	6.7	7.0	5.7	6.0	7.7	6.6
OFI-FWY	5.7	7.0	7.0	4.7	7.3	6.3	5.0	4.7	6.0	7.0	9.0	6.3	6.7	5.7	7.3	7.0	7.3	7.3	5.0	4.7	6.7	8.0	6.7	6.7	7.0	5.7	6.0	8.0	6.5
ATF-196	5.7	7.0	6.7	4.0	8.0	7.0	5.0	5.0	6.0	7.0	8.7	6.3	6.0	6.7	7.3	7.0	7.3	7.3	4.7	5.0	7.0	8.3	6.7	6.0	5.7	5.7	6.3	7.7	6.5
SRX 8500	7.3	7.0	6.7	4.3	7.0	6.7	5.0	5.0	6.0	7.0	8.7	6.3	6.7	6.0	7.0	7.0	7.3	7.3	6.0	4.0	7.0	8.3	6.7	6.0	5.7	5.7	6.3	7.7	6.5
FINELAWN PETITE	7.0	7.0	7.0	4.7	7.0	6.7	5.0	5.0	6.0	7.0	8.7	6.3	6.7	6.0	7.0	7.0	7.3	7.3	5.0	4.0	7.0	8.3	6.7	6.0	5.7	5.7	6.3	7.7	6.5
SOUTHERN CHOICE	5.7	7.0	7.0	4.3	7.0	6.7	5.0	5.7	6.0	7.3	8.7	6.7	6.7	5.7	7.3	7.0	7.3	7.3	5.3	3.3	6.7	8.0	6.7	6.7	5.3	5.7	6.7	8.0	6.5
ANTHEM II (TMI-FMN)	5.7	7.0	7.0	5.0	7.3	6.3	5.0	5.3	6.0	7.0	8.7	6.0	6.7	5.7	7.0	7.0	7.3	7.3	5.0	4.3	6.0	8.0	6.3	6.3	7.3	6.0	6.7	8.0	6.5
APACHE II	7.3	7.0	7.0	4.3	7.7	6.7	5.3	5.3	6.0	7.3	8.3	7.0	6.3	5.7	7.3	7.0	7.0	7.3	5.3	4.7	6.0	7.7	6.3	6.3	6.0	6.0	6.7	8.0	6.5
PST-5T0	6.3	7.0	7.0	4.3	7.7	6.7	5.3	4.0	6.0	7.0	9.0	6.0	6.7	5.7	7.0	6.7	6.7	7.7	6.0	4.7	6.0	7.7	6.3	6.7	6.7	6.0	6.0	7.7	6.5
AZTEC II (TMI-AZ)	6.3	7.0	6.7	4.7	7.0	6.7	5.0	5.7	5.7	7.0	8.7	6.3	6.0	6.0	7.3	7.0	7.3	7.3	4.7	5.0	7.0	8.3	6.7	6.0	5.7	5.7	6.3	7.7	6.5
COCHISE II	7.3	7.0	6.7	4.7	7.0	6.7	5.3	5.0	6.0	7.0	8.7	6.3	7.3	5.3	7.3	7.0	7.0	7.3	6.0	4.0	7.0	8.3	6.7	6.0	5.7	5.7	6.3	7.7	6.5
WOLFPACK (PST-R5TK)	6.0	7.0	6.7	4.5	7.0	6.0	5.3	5.3	5.7	7.0	9.0	6.3	6.3	5.7	7.0	7.0	7.3	7.3	4.3	3.7	7.0	7.7	6.0	6.3	5.7	5.7	6.3	7.7	6.4
RED COAT (ATF-038)	6.0	7.0	6.0	4.5	7.0	6.0	5.3	5.3	5.7	7.0	9.0	6.3	6.3	5.7	7.0	7.0	7.3	7.3	4.7	4.0	6.7	7.7	6.0	6.3	5.7	5.7	6.3	7.7	6.4
PIXIE E+	6.3	7.0	6.7	4.3	7.3	7.0	5.0	6.0	6.0	7.0	8.3	6.0	6.7	5.0	7.3	7.0	7.3	7.3	5.3	4.7	6.0	7.7	6.3	6.3	6.0	6.0	6.7	8.0	6.5
R5AU	6.0	7.0	6.7	4.7	7.0	6.7	5.0	6.0	6.0	7.0	9.0	6.0	6.7	5.7	7.0	6.7	6.7	7.7	6.0	4.7	6.0	7.7	6.3	6.0	5.3	6.0	6.0	7.7	6.5
WX3-275	5.7	7.0	6.7	4.7	7.0	6.3	5.0	4.3	6.0	7.0	8.3	7.0	6.7	5.3	7.3	7.0	7.3	7.3	5.7	4.3	7.7	7.7	6.3	6.7	6.3	5.3	7.0	7.0	6.4
TOMAHAWK-E	6.0	7.0	6.7	4.7	7.0	6.3	5.0	4.7	6.3	6.3	9.0	6.3	6.7	5.3	7.3	7.0	7.0	7.0	4.7	4.0	6.7	7.7	6.3	6.7	5.3	5.0	6.0	6.7	6.4
TULSA	6.3	7.0	6.7	5.3	7.0	7.3	4.7	4.7	6.3	6.3	9.0	6.3	6.7	5.0	7.3	7.0	6.7	6.7	5.7	4.0	6.7	8.0	6.7	6.3	5.3	5.0	6.0	6.7	6.4
BONSAI 2000 (BULLET)	6.3	7.0	6.7	4.3	7.0	6.7	5.0	5.7	5.7	7.0	8.3	6.0	6.0	5.3	8.0	7.0	6.7	7.3	4.3	4.0	7.0	7.7	6.3	6.7	6.3	6.0	6.3	7.7	6.4
EMPRESS	6.3	7.0	6.7	4.3	7.3	6.3	5.3	5.0	5.7	7.0	9.0	6.0	6.0	5.3	8.0	7.0	6.7	7.3	4.3	4.0	7.0	7.7	6.3	6.7	5.3	6.0	6.3	7.7	6.4
BANDANA (PST-R5AE)	6.7	7.0	7.0	5.0	7.0	6.7	5.3	5.3	5.7	7.3	8.3	6.0	6.0	5.3	7.7	7.0	7.3	7.0	4.7	3.7	6.7	8.0	6.3	6.3	5.7	5.3	6.0	7.7	6.4
DUSTER	6.0	7.0	6.7	4.0	7.7	6.7	5.0	4.7	6.0	7.0	9.0	6.0	6.7	5.0	7.0	7.0	7.3	7.0	5.0	4.3	7.0	7.3	7.0	6.3	5.7	5.3	6.0	7.7	6.4
OFI-96-32	6.3	7.0	6.7	4.5	7.0	6.0	5.3	5.3	6.3	7.0	8.7	6.0	6.7	5.0	7.0	6.3	7.0	7.3	5.7	4.0	6.7	7.7	6.7	6.3	5.3	6.0	6.0	7.3	6.3
GOOD-EN (KOOS 96-14)	7.0	7.0	6.7	4.7	7.0	6.7	5.0	5.3	6.3	7.0	8.7	6.0	6.7	5.0	7.0	7.0	6.7	7.3	5.3	4.0	6.7	7.3	7.0	6.7	5.7	5.3	6.0	7.3	6.3
JAGUAR 3	5.7	7.0	6.3	4.3	7.0	6.7	5.0	4.3	6.0	7.0	8.7	6.0	6.3	5.3	7.0	7.0	4.7	8.0	5.7	4.3	6.7	7.3	6.7	6.7	5.7	6.7	6.0	7.7	6.3
FALCON II	6.7	7.0	6.7	4.3	6.0	6.7	5.0	6.0	6.3	7.0	9.0	6.3	6.7	4.7	7.0	7.0	7.0	7.0	3.7	3.7	6.7	7.7	6.7	6.7	6.0	6.3	6.0	7.7	6.3
WVPB-1B	6.7	7.0	6.3	5.0	7.0	6.3	5.0	4.0	6.0	7.0	8.0	6.3	6.5	5.0	7.3	7.0	7.3	7.0	5.0	4.3	7.3	7.3	6.7	5.7	5.7	6.3	6.0	6.7	6.3
PSII-TF-10	5.7	7.0	6.3	4.7	6.3	6.7	5.0	4.7	6.0	7.0	8.3	6.3	6.0	5.7	7.0	7.0	7.3	7.0	5.7	3.7	7.0	7.7	6.7	6.3	4.7	5.3	6.7	8.0	6.3

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GENETIC COLOR RATINGS OF TALL FESCUE CULTIVARS
1998 DATA

GENETIC COLOR RATINGS 1-9; 9=DARK GREEN

NAME	AR1	CA1	CA3	DE1	GAT	IA1	IL1	IL2	IN1	KS2	KY1	MD1	M11	MO1	MO3	MS1	NE1	NE2	NJ1	NJ2	NY1	OH1	OK1	SC2	UT1	VA1	VA4	WA1	MEAN	
SR 8210	5.3	7.0	7.0	5.3	7.3	6.0	5.0	5.0	6.0	6.7	8.7	6.3	6.3	5.0	7.7	7.0	7.0	7.0	7.3	5.0	3.7	7.0	7.3	6.0	6.0	5.7	5.7	6.0	7.0	6.3
EQUINOX (THI-N91)	6.7	7.0	6.7	3.7	6.3	5.7	5.0	4.7	6.0	7.0	8.0	6.3	6.3	5.3	7.3	7.0	7.0	7.0	7.0	5.0	4.3	6.7	7.3	6.3	6.7	6.0	6.0	6.0	7.3	6.2
MARKSMAN	6.3	7.0	7.0	4.7	7.0	6.0	5.0	4.7	6.0	7.0	8.0	6.0	6.7	5.0	7.7	7.0	7.0	7.0	7.0	4.0	3.3	7.3	7.3	6.3	6.7	5.7	5.7	6.0	7.3	6.2
EC-101	6.7	7.3	6.0	4.3	6.7	5.7	5.0	4.7	6.0	7.0	8.0	6.0	6.5	4.7	6.7	7.0	7.0	7.0	7.3	4.7	4.0	6.7	7.7	7.0	6.7	5.7	5.7	6.0	7.3	6.2
PEDESTAL (PC-A0)	5.3	7.0	6.3	4.7	7.0	7.0	5.3	4.0	5.3	7.0	9.0	6.3	6.3	5.0	6.7	7.0	7.0	7.3	7.3	5.0	4.0	6.7	7.3	5.7	6.3	5.7	5.7	6.0	7.7	6.2
ISI-TF9	6.0	7.0	6.3	4.7	7.0	6.0	5.3	4.7	5.7	6.7	9.0	6.3	6.7	5.0	6.7	7.0	7.0	7.3	7.3	4.7	3.3	6.7	7.0	6.7	6.3	5.3	5.3	6.0	7.0	6.2
WPEZE (WVPB-1C)	7.0	7.0	6.7	4.3	6.7	4.0	7.0	4.7	5.3	6.0	8.7	6.0	6.7	5.0	7.0	7.0	7.0	7.3	7.3	4.7	3.3	6.0	7.0	6.3	6.7	5.0	5.3	6.0	7.0	6.2
ATF-020	5.7	7.0	6.7	4.0	7.0	5.7	5.0	4.7	5.3	6.7	9.0	6.7	6.0	5.3	7.7	7.0	7.0	7.7	7.7	4.7	4.0	7.0	7.3	6.7	6.3	5.0	5.3	6.3	7.3	6.2
DP 50-9011	6.0	7.3	6.7	6.0	6.0	5.0	5.0	4.7	6.0	7.0	8.0	6.7	6.0	5.3	7.0	7.0	7.0	7.7	7.7	4.7	4.0	7.0	7.3	6.7	6.3	5.0	5.3	6.0	7.0	6.2
CU9502T	6.0	7.0	6.3	4.3	6.7	5.7	5.3	4.3	6.0	6.0	8.7	6.3	6.7	5.0	7.0	7.0	7.3	7.3	7.3	4.3	3.7	6.7	7.0	6.0	6.0	5.3	5.7	6.0	6.7	6.2
MUSTANG II	6.3	7.0	6.7	4.0	7.7	6.0	5.0	4.0	6.0	7.0	8.0	6.0	7.0	5.0	6.7	7.0	7.0	7.0	7.0	4.0	3.7	7.0	7.0	6.0	6.0	5.0	5.3	6.0	7.0	6.1
REGIMENT	6.0	7.0	7.0	4.0	6.7	7.0	5.3	4.0	6.0	6.0	8.0	6.3	6.0	5.0	7.3	6.7	7.0	7.3	7.3	4.3	4.0	7.0	7.3	6.3	6.3	4.7	5.7	6.0	7.3	6.1
RENEGADE	6.0	7.0	7.0	4.0	6.7	7.0	5.3	4.3	6.0	6.3	8.0	6.3	6.7	5.0	6.3	7.0	7.0	7.3	7.3	4.3	4.0	7.0	7.3	6.3	6.3	5.0	5.3	6.0	7.7	6.1
ATF-253	6.3	7.0	6.7	3.7	7.0	7.0	4.3	3.3	5.3	6.7	8.7	6.0	7.0	5.3	7.0	7.0	7.0	7.0	7.0	5.0	4.3	6.7	7.3	7.0	6.0	4.7	5.3	6.0	7.7	6.1
ATF-188	5.3	7.0	6.3	4.0	7.7	6.3	5.0	3.7	6.0	6.7	7.3	6.3	7.0	5.0	7.0	7.0	7.0	7.7	7.7	3.3	4.3	7.0	7.3	7.0	6.0	4.7	5.3	6.0	7.3	6.1
ATF-022	6.3	7.3	7.0	5.7	6.7	6.3	4.3	3.7	5.7	6.7	8.0	6.0	6.3	5.3	7.0	7.0	7.0	7.7	7.7	3.3	4.3	7.0	7.3	6.7	5.7	5.3	5.7	6.0	8.0	6.1
ISI-TF11	6.0	7.0	7.0	4.0	7.0	6.3	5.0	4.7	5.7	7.0	9.0	6.0	7.0	5.0	7.0	7.0	7.0	7.0	7.0	5.0	2.7	6.7	7.3	6.7	7.0	4.7	5.7	6.0	7.0	6.1
RESERVE (ATF-182)	6.0	6.7	6.0	4.7	6.7	6.0	5.0	4.0	6.0	6.3	8.0	6.0	6.7	5.0	7.0	7.0	7.0	7.0	7.0	5.0	2.7	6.7	7.3	6.7	7.0	4.7	5.3	6.3	7.0	6.1
CONSTOCK (SSDE31)	5.7	7.0	6.3	4.0	6.7	6.3	5.3	3.3	5.7	6.7	8.0	6.3	6.7	5.0	6.7	7.0	7.0	7.0	7.0	3.7	4.0	7.0	7.3	5.7	6.7	5.7	5.3	6.3	7.0	6.1
PST-523	6.0	7.0	6.7	4.0	7.7	6.3	5.0	4.7	5.7	6.7	7.3	6.0	6.0	5.3	7.0	7.0	7.0	7.0	7.0	4.3	4.3	6.7	7.0	6.0	6.3	5.3	6.7	5.0	7.7	6.1
WVPB-1D	5.7	7.0	6.7	4.7	6.3	6.7	4.7	4.7	5.3	7.0	8.3	6.3	6.7	5.3	7.0	7.0	7.0	7.3	7.3	4.3	3.7	6.7	7.3	6.0	6.0	5.7	5.0	6.0	7.3	6.1
AXIOM (ATF-192)	5.3	7.0	6.3	5.0	6.3	6.0	5.0	4.3	5.7	6.7	7.3	5.7	6.0	5.3	7.0	7.0	7.0	7.3	7.3	4.3	3.7	6.7	7.3	6.0	6.0	4.0	6.3	6.0	6.7	6.1
PSII-TF-9	5.7	7.0	6.0	4.0	7.3	6.3	5.0	3.7	5.7	7.0	8.0	6.0	6.0	5.0	7.3	7.0	7.0	7.3	7.3	4.3	3.7	6.7	7.3	6.3	6.0	4.7	5.7	6.0	7.7	6.0
KITTY HAWK S.S.T. (SS45DW)	5.7	7.0	6.3	4.0	6.3	6.3	5.0	4.0	6.0	6.3	7.3	5.7	6.3	5.3	7.3	6.7	7.0	7.3	7.3	4.7	3.7	6.7	7.3	6.3	6.0	5.3	5.7	6.0	7.3	6.0
LEPRECHAUN	6.3	7.0	6.0	4.7	7.0	6.3	4.7	4.0	5.0	6.3	7.3	5.7	6.3	5.3	6.7	7.0	7.0	7.3	7.3	4.3	3.3	6.7	7.3	6.0	6.0	6.0	5.7	6.3	7.3	6.0
ATF-257	6.3	7.0	6.0	4.0	6.7	6.7	5.3	4.0	5.0	7.0	8.7	5.3	6.0	5.0	6.3	6.7	6.7	6.7	6.7	3.7	5.0	7.0	7.3	6.0	6.0	5.0	5.3	6.3	7.3	6.0
SRX 8084	5.3	7.3	7.0	4.0	6.3	6.3	5.0	5.3	5.7	7.0	8.0	6.0	6.7	5.3	7.0	7.0	7.0	7.3	7.3	4.3	3.3	6.3	7.0	5.7	5.7	5.0	5.7	6.0	6.3	6.0
BONSAI	5.7	7.0	6.3	4.3	5.7	6.7	4.7	4.7	4.7	7.3	6.7	7.0	7.7	6.7	4.7	7.3	6.7	7.0	7.7	3.7	4.3	6.3	7.0	5.7	6.0	4.3	6.0	6.7	7.0	6.0
JSC-1	5.7	7.0	6.3	4.3	5.7	6.7	4.7	4.3	5.7	6.0	8.0	5.7	6.0	5.0	7.0	7.0	7.0	7.0	7.0	4.0	3.3	6.7	7.0	6.3	6.0	4.7	6.0	6.3	7.3	5.9
PRO 8430	5.7	7.0	6.3	4.0	7.0	6.3	5.0	4.0	5.3	7.0	7.3	5.7	6.0	5.0	7.0	6.3	6.3	7.0	7.0	3.7	3.0	6.3	7.3	6.0	6.0	4.0	5.0	6.0	7.0	5.9
SHENANDOAH	7.0	7.0	6.3	4.3	6.7	6.3	5.0	3.7	5.7	6.0	7.7	6.0	6.0	4.3	6.7	6.7	6.3	7.0	7.0	3.0	3.0	6.3	6.7	6.3	5.7	4.7	5.3	6.0	7.0	5.9
SAFARI	6.0	7.0	6.0	4.3	6.7	6.0	5.3	2.7	6.0	6.7	7.3	6.0	6.3	4.7	7.3	6.7	6.7	6.3	7.0	3.3	3.0	6.7	6.7	5.7	5.7	4.7	5.3	6.0	7.0	5.8
DLF-1	6.0	7.0	5.0	4.7	6.3	6.0	4.7	2.3	5.3	7.0	7.0	5.0	6.3	4.7	6.7	6.7	6.7	6.7	6.7	3.3	3.3	6.0	6.7	5.7	5.7	4.3	5.3	6.0	6.7	5.8
TITAN 2	5.7	7.0	5.7	4.3	6.7	6.3	4.3	2.7	5.0	6.7	6.7	5.3	6.0	4.7	6.0	7.0	6.0	6.7	6.7	3.7	2.7	6.0	7.0	5.7	6.0	4.0	6.3	6.0	6.7	5.6
JITFC-96	5.7	7.0	5.7	4.0	5.7	5.7	4.7	2.7	5.0	6.0	7.0	5.0	6.0	4.7	5.7	7.0	6.3	6.7	6.7	3.0	3.0	6.7	7.0	5.7	6.0	4.3	5.0	6.0	6.3	5.5
AV-1	4.3	7.0	5.0	4.3	5.3	6.3	4.7	3.3	5.0	5.7	7.0	5.0	6.0	4.0	5.3	6.0	6.0	6.3	6.3	2.0	2.7	5.7	7.0	5.0	5.7	4.0	6.3	6.0	6.0	5.3
JITFA-96	4.7	6.3	5.0	4.3	5.7	5.7	4.3	2.0	5.0	5.7	6.0	5.7	5.7	3.0	6.0	6.0	6.0	6.3	6.3	2.0	2.7	6.3	6.7	5.7	5.7	4.3	5.3	6.0	6.0	5.1
DP 7952	5.0	7.0	5.0	4.0	5.0	6.0	4.3	2.7	5.3	6.7	6.0	5.3	5.7	4.0	5.3	6.0	6.0	6.3	6.0	2.3	2.3	5.0	6.7	5.3	5.3	4.3	5.7	5.0	5.7	5.1
ARID	5.0	7.0	5.0	3.5	5.7	5.7	4.3	1.3	5.0	5.7	6.0	5.3	5.0	3.3	4.7	6.3	5.7	6.0	6.0	2.7	2.0	5.3	6.3	5.3	5.7	3.7	6.0	5.7	5.3	4.9
KENTUCKY-31 W/ENDO.	4.0	5.0	5.0	4.0	4.3	6.0	4.0	1.0	3.3	4.0	4.0	4.0	5.0	3.0	4.3	4.3	5.0	5.0	5.0	2.0	1.0	5.0	6.0	5.0	5.0	3.7	5.0	4.3	4.3	4.2
LSD VALUE	1.3	0.4	0.6	1.1	1.0	1.1	0.7	1.7	0.7	0.8	0.6	0.8	1.1	0.8	1.1	0.5	1.0	0.9	1.3	1.3	1.0	0.7	0.7	0.9	1.6	1.2	0.6	1.0	0.2	
C.V. (%)	12.1	3.3	5.8	14.8	8.5	10.7	8.4	19.8	7.4	7.1																				

TABLE 27.

LEAF TEXTURE RATINGS OF TALL FESCUE CULTIVARS 1/
1998 DATA

LEAF TEXTURE RATINGS 1-9; 9=VERY FINE 2/

NAME	AR1	CA1	CA3	DE1	GA1	JA1	IL1	IL2	IN1	KS2	KY1	M11	M01	M03	MS1	NE1	NE2	NU2	OH1	OK1	SC2	VA1	VA4	WA1	MEAN
GAZELLE	8.0	7.0	6.3	5.7	7.3	6.7	7.0	8.7	6.0	7.0	8.7	6.7	6.0	7.7	6.0	8.7	7.7	6.7	4.0	7.7	6.3	6.3	7.0	2.3	6.7
PICK RT-95	8.3	6.7	6.0	5.0	6.7	6.7	6.7	9.0	5.7	7.0	8.0	7.0	6.3	7.0	6.7	8.0	8.0	7.0	4.3	7.7	6.0	6.7	6.7	2.0	6.7
BAR FA 60	7.7	6.7	6.0	6.0	6.7	6.7	5.7	8.0	6.0	7.3	8.3	7.0	6.0	6.3	6.0	8.3	6.7	6.0	5.3	7.7	6.3	6.3	7.3	3.0	6.5
REBRANDT (LTP-4026 E+)	8.7	6.7	5.7	6.0	7.0	5.7	6.7	9.0	5.3	7.0	8.0	6.3	6.0	6.0	6.3	8.0	7.7	6.3	4.3	8.0	6.7	6.0	6.0	2.7	6.5
MASTERPIECE (LTP-SD-TF)	7.0	7.3	5.7	6.0	7.0	7.7	6.3	8.0	5.7	7.0	8.3	6.3	5.7	6.3	5.7	8.0	6.7	5.7	4.7	7.3	6.7	6.0	7.0	2.7	6.4
MB 26	8.0	6.7	6.0	4.7	6.5	6.7	5.7	8.7	6.0	7.0	8.3	6.7	5.7	6.3	6.0	7.7	6.7	5.7	4.7	7.3	6.7	6.0	7.0	2.7	6.4
SCORPION (ZPS-2PTF)	8.0	6.3	6.0	4.7	7.3	6.0	6.0	9.0	5.7	7.0	8.7	6.7	6.3	5.7	5.7	7.7	8.3	6.0	3.7	7.7	6.0	6.0	7.0	2.3	6.4
MILLENNIUM (TMI-RBR)	7.7	6.0	6.0	4.0	7.3	6.7	6.7	8.3	5.7	7.0	9.0	6.7	6.0	5.7	5.7	8.0	7.7	5.7	3.7	7.3	6.3	6.3	6.7	2.0	6.4
BAR FA 6LV	7.7	7.0	6.0	4.0	7.3	7.3	5.7	7.0	5.7	7.0	8.3	6.5	6.0	5.7	5.7	8.0	7.7	5.7	4.7	8.0	6.3	5.7	7.7	2.7	6.4
CU9502T	6.7	6.3	6.3	5.3	6.7	7.0	5.3	6.7	6.0	6.7	9.0	6.7	7.0	6.3	6.0	7.7	7.7	5.7	3.7	7.7	6.0	6.3	6.7	2.7	6.3
COYOTE	8.3	6.3	6.0	6.5	6.7	6.3	6.0	8.3	5.7	7.0	8.0	6.7	6.0	6.3	6.0	7.0	7.0	5.3	4.0	7.7	6.0	6.3	6.3	2.3	6.3
BULLDANG (PICK GA-96)	8.0	6.3	6.0	5.3	7.3	6.0	5.7	6.7	6.0	6.7	8.3	6.3	6.0	6.7	6.0	8.0	7.0	5.3	3.0	7.7	6.0	6.7	7.3	2.7	6.3
JAGUAR 3	7.0	6.0	6.0	6.7	6.7	6.7	5.7	8.3	5.7	7.3	9.0	6.3	6.0	6.7	5.7	8.0	7.0	5.7	3.0	7.7	6.0	6.7	7.3	2.7	6.3
BAR FA6 US1	7.7	6.3	6.0	5.0	7.3	6.3	5.7	6.0	5.7	6.7	8.3	7.0	6.0	7.0	6.7	8.3	7.7	5.0	3.0	8.0	6.3	6.0	7.0	2.3	6.3
BAR FA60 USA	7.3	6.3	6.0	4.3	7.0	6.7	5.7	6.7	6.0	6.3	6.7	6.3	6.0	7.0	6.3	8.0	7.0	5.3	4.0	7.7	6.3	6.3	6.7	2.3	6.3
ATF-196	8.0	6.0	6.3	4.0	7.3	7.3	5.7	7.3	5.0	6.3	6.7	6.3	6.0	7.0	6.3	8.0	8.0	6.0	4.0	7.3	6.3	5.7	7.0	2.7	6.3
ZPS-5L2	7.7	6.0	6.0	5.0	7.0	6.3	6.0	7.3	5.3	7.0	8.3	7.3	5.7	7.3	6.3	7.3	7.0	4.7	3.7	7.0	6.3	6.3	7.0	2.7	6.3
PICK FA 20-92	6.7	6.0	6.0	4.5	7.0	6.0	6.0	8.0	6.0	7.0	8.0	6.7	5.7	5.7	6.3	8.3	6.3	6.0	3.3	8.0	6.0	6.0	7.0	2.3	6.3
PLANTATION (PENNINGTON-1901)	7.7	6.3	6.0	6.3	7.0	6.3	5.7	7.0	5.3	6.7	8.0	6.3	6.0	6.0	6.7	8.0	7.7	5.7	3.7	7.7	6.3	6.0	6.7	2.3	6.3
OFI-931	7.0	6.0	6.0	6.0	6.7	5.7	5.7	7.7	5.3	6.7	9.0	6.0	5.0	6.7	6.7	8.0	7.7	5.0	3.7	7.7	6.3	6.0	6.7	2.3	6.3
SRX 8500	7.7	6.3	6.0	6.0	6.7	5.7	5.7	7.7	5.3	7.0	9.0	6.3	6.0	6.7	6.7	8.0	7.3	5.0	3.7	7.7	6.7	6.3	7.0	2.0	6.2
ANTHEM II (TMI-FRH)	7.3	7.0	6.3	6.0	6.5	6.7	6.3	8.3	5.0	6.7	7.0	6.3	6.0	5.7	5.7	7.0	7.0	5.7	3.0	8.0	6.0	6.0	6.7	2.3	6.2
BAR FA6 US3	7.7	6.7	6.0	4.3	7.0	6.0	5.7	6.3	5.3	6.7	8.0	6.3	6.0	6.3	6.0	8.0	7.0	6.3	3.7	7.7	6.3	6.3	7.0	2.7	6.2
PICK FA 15-92	7.3	6.3	6.0	4.7	7.3	6.3	6.0	8.0	5.0	6.7	8.0	6.3	6.3	7.0	6.0	8.0	7.0	5.3	3.7	8.0	6.3	5.7	6.3	3.3	6.2
PICK FA XK-95	7.7	7.0	6.0	5.0	6.3	5.3	5.7	6.7	6.0	6.7	8.0	6.3	6.7	6.3	6.0	7.7	6.0	6.3	3.3	7.7	6.7	6.0	7.0	2.0	6.2
BONSAI 2000 (BULLET)	6.3	6.7	6.3	5.3	6.7	5.3	5.7	8.0	6.0	7.0	8.3	6.3	6.7	5.7	5.3	7.7	7.7	6.7	3.3	7.7	6.3	6.0	7.0	3.0	6.2
RED COAT (ATF-038)	7.0	6.7	6.0	6.3	6.7	5.3	5.7	8.0	5.7	6.3	8.3	7.3	6.0	5.7	6.0	7.3	7.3	4.7	3.7	7.0	6.7	6.3	6.3	2.3	6.2
ATF-188	6.3	6.3	5.7	6.0	6.7	6.0	5.7	6.7	5.7	6.3	7.7	6.0	6.0	6.0	6.3	7.7	7.7	6.0	4.7	8.0	6.3	5.7	6.7	2.7	6.2
BRANDY (J-101)	7.7	6.0	6.0	5.7	6.7	7.0	5.3	7.7	5.3	6.3	8.0	6.7	6.3	5.7	6.3	7.3	6.7	5.0	3.7	8.0	6.7	6.0	7.0	2.0	6.2
SHORTSTOP II	7.0	7.0	6.0	4.7	7.3	6.0	5.7	5.7	5.3	6.3	8.0	6.3	6.7	6.7	5.7	8.0	8.0	5.3	3.7	7.7	6.7	6.0	7.0	2.3	6.2
MB 212	7.0	6.3	5.7	5.3	7.0	6.3	5.7	5.7	5.3	6.3	8.0	6.3	6.7	6.7	5.7	8.0	6.7	5.3	3.7	7.7	6.7	6.3	7.3	2.3	6.2
SUNPRO	8.3	6.3	6.0	4.3	7.0	6.3	6.0	8.0	5.0	6.7	8.0	6.3	6.3	6.0	6.0	8.0	7.0	5.3	3.3	7.7	6.3	6.3	6.7	2.3	6.2
CROSSFIRE II	7.3	6.7	6.0	6.0	7.7	5.3	6.3	8.3	5.0	6.3	7.7	6.3	6.0	6.0	5.7	8.0	7.7	5.3	3.3	8.0	6.0	5.7	7.0	2.7	6.2
RESERVE (ATF-182)	7.0	6.3	6.0	6.0	7.7	5.3	6.3	8.3	5.0	6.3	7.7	6.3	6.0	6.0	5.7	8.0	7.7	5.3	3.3	8.0	6.0	5.7	7.0	2.7	6.2
EMPRESS	7.0	6.7	5.3	5.7	7.3	6.7	5.7	7.7	5.3	6.7	7.3	6.7	5.3	5.7	6.0	5.7	8.0	6.0	3.3	8.0	6.0	5.7	7.0	2.7	6.2
REBEL SENTRY (AA-A91)	6.3	6.0	5.3	6.3	6.3	6.3	5.7	6.7	5.3	6.7	7.3	6.7	5.3	5.7	6.0	7.3	7.0	5.3	3.3	7.3	6.7	5.7	6.3	2.7	6.2
SR 8210	6.3	6.0	6.0	5.7	6.7	6.0	6.0	6.7	6.0	7.0	8.0	7.0	6.7	6.7	6.3	8.0	6.7	5.0	4.3	7.0	6.7	5.7	6.0	2.0	6.2
PST-523	7.7	6.7	6.0	6.0	6.7	6.3	6.3	7.0	6.0	7.0	7.3	7.0	6.0	7.3	6.0	7.0	7.0	5.7	3.7	7.3	6.0	5.7	6.7	2.0	6.1
ARID 3 (J-98)	7.0	6.3	5.7	5.0	6.3	5.7	5.7	7.3	5.3	6.3	8.0	6.7	5.3	6.3	6.0	7.0	6.7	5.3	3.0	8.0	6.3	5.7	5.7	1.7	6.1
OLYMPIC GOLD (PST-5E5)	6.7	5.7	6.0	6.7	7.3	6.7	6.0	8.3	5.0	6.7	7.7	6.7	5.3	5.7	6.0	6.3	6.3	5.3	3.7	7.7	6.3	6.7	7.3	2.3	6.1
MUSTANG II	7.3	6.0	6.0	5.3	6.7	6.3	6.3	8.3	5.0	6.7	7.7	6.0	5.7	5.7	6.3	6.3	7.0	5.0	2.7	7.7	6.3	6.0	6.0	2.3	6.1
AZTEC II (TMI-AZ)	7.3	6.7	6.0	5.7	6.0	6.3	6.0	7.3	5.0	7.0	7.7	6.3	6.0	5.7	5.3	7.0	7.0	6.3	3.7	8.0	6.3	5.7	6.7	1.7	6.1
REGIMENT	7.0	5.7	6.0	6.3	5.7	6.3	6.0	8.0	5.7	6.7	7.7	7.3	6.0	5.7	5.3	6.7	6.7	6.0	3.7	7.7	6.7	5.7	6.7	2.3	6.1
SHENANDOAH II (WRS2)	6.3	6.0	6.0	6.0	7.0	6.0	6.3	8.7	5.3	6.7	7.3	6.7	5.0	6.0	6.0	6.0	7.3	5.3	3.0	7.7	6.0	5.3	7.0	2.7	6.1

Table 31

9900368

TABLE 27. (CONT'D)

LEAF TEXTURE RATINGS OF TALL FESCUE CULTIVARS
1998 DATA

LEAF TEXTURE RATINGS 1-9; 9=VERY FINE

NAME	AR1	CA1	CA3	DE1	GA1	IA1	IL1	IL2	IN1	KS2	KY1	MI1	MO1	MO3	MS1	NE1	NE2	NJ2	OH1	OK1	SC2	VA1	VA4	WA1	MEAN
OFI-FWY	7.3	6.3	6.0	5.7	6.3	5.7	5.3	6.7	5.3	6.3	7.7	6.7	5.7	6.0	6.3	7.7	7.3	5.3	3.0	7.0	6.0	6.7	7.0	2.7	6.1
CORONADO	6.7	6.3	5.7	5.7	6.7	7.0	6.3	7.7	5.0	7.0	7.0	6.7	5.3	6.0	6.0	7.0	6.3	5.3	3.3	7.3	6.3	6.3	6.3	2.3	6.1
OFI-951	7.7	5.7	6.0	5.3	6.0	6.3	6.0	8.3	5.3	6.7	7.0	6.3	5.7	6.0	5.3	7.7	6.7	5.3	3.7	7.3	6.3	6.3	6.3	2.3	6.1
TULSA	7.0	6.0	6.3	5.0	7.0	6.0	6.3	7.0	5.3	6.7	8.0	6.0	5.7	6.3	6.0	7.0	6.3	5.3	3.7	7.3	6.7	6.0	6.3	2.3	6.1
BAR FA6 US2U	7.3	6.3	5.3	5.3	7.0	7.0	6.3	7.3	5.7	7.0	7.7	6.3	6.0	5.7	6.0	7.0	5.0	4.7	2.7	7.7	6.3	5.7	7.0	2.7	6.0
OFI-96-31	6.3	6.0	6.0	5.7	6.0	6.0	6.0	7.3	5.7	7.0	7.7	6.7	5.3	6.3	5.7	7.3	6.7	5.0	3.0	7.3	6.3	6.3	7.0	2.0	6.0
WATCHDOG (PICK FA 8-93)	7.0	6.3	6.0	5.0	6.5	5.7	5.7	8.0	6.0	6.7	7.7	5.7	5.7	6.0	6.0	8.0	6.7	5.3	3.7	7.3	6.0	5.3	6.0	2.3	6.0
ARABIA (J-5)	7.3	6.0	6.0	5.0	6.3	5.7	5.3	8.3	5.3	6.3	8.0	6.7	5.7	6.0	6.3	7.3	6.3	4.7	3.7	7.7	6.7	6.0	7.0	2.0	6.0
COCHISE II	7.0	6.0	6.0	5.0	6.3	6.0	5.7	7.0	5.0	6.3	7.0	6.7	6.0	6.0	6.7	7.0	5.0	5.3	4.0	7.7	6.0	6.0	7.0	2.0	6.0
MB 29	7.0	6.0	5.3	5.7	7.0	5.0	6.0	8.0	5.0	7.0	8.0	6.3	5.7	5.7	6.0	7.3	6.7	4.7	2.7	7.3	6.7	6.0	7.0	2.7	6.0
PICK FA UT-93	7.0	6.0	5.7	4.3	6.0	7.3	5.0	5.7	5.7	6.7	7.3	5.3	6.0	7.3	6.0	8.0	6.3	5.3	2.7	8.0	6.3	5.3	7.0	2.0	6.0
WOLFPACK (PST-R5TK)	6.3	6.3	6.0	6.0	6.7	5.7	6.0	7.7	5.0	6.0	8.7	6.3	5.7	5.0	6.0	7.0	7.0	5.3	4.0	8.0	6.3	5.3	7.0	2.0	6.0
DUSTER	6.7	6.0	5.7	6.0	6.7	5.3	5.7	8.0	5.0	6.3	7.3	6.3	6.3	6.0	5.7	7.0	7.0	5.3	3.3	8.0	6.3	5.3	6.7	2.3	6.0
ATF-020	6.7	6.3	6.0	5.3	6.7	5.3	5.3	8.3	5.0	6.0	6.3	6.3	6.3	6.0	5.7	7.0	7.0	5.3	3.0	7.3	6.7	5.3	6.7	2.3	6.0
ALAMO E	6.7	6.3	5.7	4.7	7.0	7.0	5.7	6.3	5.0	6.3	7.0	6.3	5.7	5.0	6.0	7.0	7.0	5.3	3.3	7.0	6.3	5.3	6.7	2.3	6.0
EA 41	6.3	6.7	5.7	3.5	6.7	5.3	5.7	6.3	5.3	6.7	7.3	6.3	5.7	5.0	6.0	7.7	7.0	5.3	3.3	7.0	6.3	5.3	6.7	2.3	6.0
PICK FA 6-91	7.0	6.0	5.3	6.0	7.0	5.7	5.3	7.7	5.0	6.0	7.3	6.3	6.0	6.0	6.0	7.0	7.0	5.7	4.3	7.0	6.0	5.7	7.3	2.7	6.0
APACHE II	6.3	6.7	6.0	4.7	6.0	5.7	5.3	7.7	5.0	6.0	7.3	6.3	6.0	6.0	6.0	7.0	6.3	5.3	3.7	7.7	6.7	6.0	6.3	3.0	6.0
SOUTHERN CHOICE	7.7	6.0	6.3	6.0	7.0	5.7	5.3	7.7	5.0	6.0	7.3	6.3	6.0	6.0	6.0	7.0	6.3	4.7	3.7	8.0	6.0	5.7	6.3	2.0	5.9
DP 50-9011	6.3	6.7	6.0	5.0	6.7	7.0	5.0	8.0	5.0	6.3	7.0	6.7	6.0	5.0	6.0	7.3	6.7	5.0	3.3	7.3	6.3	5.0	7.0	2.3	5.9
MB 211	6.0	6.3	5.7	5.7	6.3	6.0	5.0	8.3	5.3	6.7	7.0	6.0	6.0	7.7	5.7	7.0	6.3	4.7	3.7	8.0	6.0	5.7	6.3	2.0	5.9
TOMAHAWK-E	6.7	5.7	5.7	6.7	6.3	6.0	6.3	7.0	5.0	7.0	7.0	6.7	6.0	5.3	6.0	6.7	6.7	4.7	3.0	7.0	6.3	6.0	6.7	2.3	5.9
WX3-275	6.3	5.7	6.0	5.3	6.7	6.0	6.7	6.0	5.3	6.0	7.3	6.7	4.7	6.0	6.3	6.7	6.7	4.3	3.0	7.0	6.0	6.0	7.0	2.3	5.9
ATF-257	6.7	6.3	6.3	5.7	6.3	4.7	5.7	8.0	5.0	7.0	8.0	6.0	6.3	5.7	6.0	7.0	6.7	5.3	3.3	7.0	6.0	6.0	7.0	2.0	5.9
BANDANA (PST-R5AE)	5.7	7.0	5.7	6.0	6.7	6.7	5.7	8.0	5.0	7.0	7.3	6.3	5.7	6.0	6.0	7.0	6.0	5.7	3.3	7.7	6.3	5.3	5.7	1.7	5.9
PICK FA N-93	6.0	6.3	6.0	5.0	6.0	5.0	6.0	7.0	5.7	6.3	7.7	6.7	5.3	6.0	6.0	6.3	5.3	4.7	3.0	7.7	6.0	6.0	6.3	2.0	5.9
PST-5M5	6.7	6.0	6.0	5.7	7.0	5.3	6.0	9.0	4.7	6.7	7.0	6.0	5.3	5.7	5.7	7.7	7.0	5.3	3.0	7.7	6.3	5.0	6.3	2.0	5.9
R5AU	6.7	6.0	6.0	5.3	7.0	6.3	6.3	8.7	5.0	6.7	7.3	6.7	6.0	5.7	5.3	6.0	5.7	4.3	3.0	7.0	6.3	5.0	6.3	2.3	5.9
CU9501T	6.3	6.0	6.0	5.0	6.7	5.7	5.7	8.0	5.3	6.0	7.3	6.7	6.0	5.7	5.3	6.0	5.7	5.0	3.0	7.3	6.3	5.7	6.0	1.7	5.9
TAR HEEL	6.7	6.0	6.0	5.3	6.7	6.3	5.3	7.7	5.0	6.7	7.3	5.7	4.7	5.0	6.3	8.0	7.0	5.0	3.0	7.3	6.3	5.7	6.0	1.7	5.9
PRO 8430	6.3	5.7	6.0	5.7	7.0	6.0	5.7	8.0	5.3	6.7	7.3	6.0	5.7	5.0	6.3	7.0	6.0	6.0	3.0	7.3	6.3	5.3	6.7	2.0	5.9
VELOCITY (AA-983)	6.0	6.0	6.0	4.7	6.3	6.3	5.7	8.0	5.3	6.7	7.7	6.0	5.7	5.3	5.7	7.0	6.0	5.0	3.0	7.3	6.3	5.3	6.7	2.0	5.9
ATF-022	7.0	6.0	5.3	5.0	7.0	5.3	5.3	6.7	5.0	6.0	7.0	6.7	5.0	6.0	6.0	8.0	7.3	4.7	2.7	7.7	6.0	5.0	6.0	2.0	5.9
MB 213	6.7	6.0	5.7	5.3	6.7	5.0	5.0	7.3	4.7	7.0	8.0	6.7	6.3	5.7	6.3	7.7	7.3	4.0	3.0	7.0	6.3	5.7	6.3	2.0	5.9
CORONADO GOLD (PST-5RT)	6.0	6.0	6.0	5.7	7.0	6.0	5.7	6.7	5.3	7.0	7.0	6.3	6.0	6.0	6.0	7.3	6.0	4.7	3.0	7.3	6.3	6.0	5.7	2.0	5.9
PST-510	6.7	6.7	5.7	4.7	6.7	6.0	5.3	7.0	5.0	7.0	8.0	6.3	6.0	6.3	6.7	5.7	5.7	5.0	3.0	7.0	6.0	6.0	7.0	2.7	5.8
MB 215	6.3	6.0	5.7	5.0	6.3	6.3	6.0	7.0	5.0	7.0	8.0	6.3	5.0	6.3	5.7	6.7	6.3	5.7	3.0	7.0	6.3	5.7	6.3	1.3	5.8
ATF-253	6.7	6.0	6.0	5.3	6.3	6.7	5.3	7.7	5.0	6.3	7.3	5.3	5.7	5.3	5.3	7.0	6.7	4.7	3.3	7.3	6.3	6.0	6.3	2.3	5.8
REBEL 2000 (AA-989)	6.0	6.0	6.0	5.0	6.3	5.3	5.7	7.5	0.6	3.7	7.0	5.3	5.7	5.3	5.3	7.0	6.7	5.7	3.3	7.3	6.3	5.3	6.0	2.3	5.8
SIENANDOAH	6.3	6.3	5.7	6.0	5.7	6.3	5.7	6.3	5.0	6.3	7.0	6.7	5.7	5.7	6.7	7.7	5.7	4.0	4.3	7.0	7.0	6.0	6.0	2.3	5.8
MB 214	6.3	6.7	6.0	4.0	6.0	6.7	5.3	6.7	5.0	7.0	7.7	6.7	6.0	5.3	5.7	7.0	6.0	4.7	3.3	7.3	6.0	5.0	6.3	2.3	5.8
ARID 2 (J-3)	6.3	5.7	5.3	4.3	6.3	5.7	5.3	8.0	4.7	6.3	7.3	6.0	6.3	5.3	5.7	6.0	5.7	4.0	3.3	7.0	6.3	5.3	6.3	2.3	5.8
BAR FA6 US6F	6.7	6.0	6.0	5.3	6.0	5.7	5.7	7.7	5.0	7.0	7.7	6.0	6.7	5.7	6.0	5.3	4.0	3.7	7.0	6.3	6.0	6.7	2.3	5.8	
ISI-TF9	6.0	6.0	5.7	6.3	6.3	6.7	5.0	8.0	5.0	7.0	7.7	6.3	5.0	5.3	5.7	6.3	6.0	5.0	3.3	7.3	6.0	5.3	6.0	2.0	5.8
PEDESTAL (PC-A0)	5.7	5.7	6.0	6.3	6.3	6.0	5.3	6.7	5.0	6.7	8.3	6.0	6.0	5.0	5.3	6.7	7.0	4.3	2.7	7.7	6.0	5.3	6.3	2.3	5.8

TABLE 27. (CONT'D)

LEAF TEXTURE RATINGS OF TALL FESCUE CULTIVARS
1998 DATA

LEAF TEXTURE RATINGS 1-9; 9=VERY FINE

NAME	AR1	CA1	CA3	DE1	GA1	IA1	IL1	IL2	IN1	KS2	KY1	MI1	MO1	MO3	MS1	NE1	NE2	NJ2	OH1	OK1	SC2	VA1	VA4	WA1	MEAN	
PIXIE E+	6.7	6.0	5.7	6.0	6.3	6.0	5.3	8.3	5.3	6.0	7.0	5.7	5.3	5.3	6.0	7.3	6.0	4.3	3.0	7.0	6.7	4.7	6.0	2.7	5.8	
MB 216	6.7	5.7	5.0	5.3	7.0	5.7	5.3	7.7	4.7	6.0	7.0	7.0	5.0	6.3	6.0	7.0	6.7	3.3	3.0	7.0	6.7	5.7	6.3	1.7	5.7	
BRAVO (RG-93)	6.7	5.7	5.7	5.7	6.7	5.7	5.0	7.7	5.0	6.3	7.0	7.0	6.0	5.7	5.7	6.0	5.3	4.3	3.0	7.0	6.0	5.3	6.7	2.3	5.7	
SAFARI	5.7	6.3	6.0	7.3	6.0	6.0	6.0	7.7	5.0	6.7	7.3	6.3	5.7	4.7	5.7	6.3	5.3	5.0	3.0	7.3	5.3	5.7	6.3	1.0	5.7	
KITTY HAWK S.S.T. (SS45DW)	6.3	6.3	5.7	6.7	6.7	6.0	5.7	7.0	5.0	7.3	7.3	6.0	5.3	5.3	6.0	6.0	4.7	4.7	3.0	7.0	6.0	5.0	6.0	2.0	5.7	
ISI-TF11	6.3	5.7	5.7	6.3	6.3	5.3	5.3	7.3	4.7	6.3	8.3	6.0	5.3	5.7	6.0	6.0	5.3	4.0	3.0	7.0	6.0	6.0	6.7	1.3	5.7	
SRX 8084	6.0	6.0	5.7	5.0	6.0	6.0	5.3	7.3	4.7	6.3	7.3	6.3	5.0	5.3	5.7	7.0	5.7	5.3	2.7	7.0	6.0	6.0	6.7	2.3	5.7	
CHAPEL HILL (TA-7)	5.7	6.0	5.7	5.0	6.7	5.3	5.3	7.0	5.0	6.3	8.3	6.0	5.3	5.3	5.7	7.3	5.3	4.0	3.0	7.0	6.0	5.3	5.7	2.3	5.7	
MB 210	6.0	6.3	5.7	5.7	6.3	6.0	5.3	7.3	5.0	6.3	7.3	5.7	5.7	5.7	5.7	6.3	6.3	4.0	3.3	7.0	6.7	5.0	7.0	1.7	5.7	
TWILIGHT II (TMI-TW)	6.0	5.3	6.0	5.7	6.3	6.0	5.3	7.0	4.7	7.0	6.7	6.0	5.7	5.7	6.0	6.7	6.3	4.7	2.7	6.7	6.7	6.0	6.3	2.0	5.7	
WVPB-1B	5.3	5.7	5.0	6.3	6.7	5.3	5.3	7.3	4.3	6.3	7.7	6.0	5.3	5.0	5.7	7.0	5.3	5.7	3.7	7.0	6.0	5.3	6.3	2.0	5.7	
TITAN 2	6.0	5.7	5.7	5.7	6.3	6.0	5.3	7.3	5.0	6.3	7.3	5.7	5.7	5.7	6.0	6.0	5.3	4.0	3.3	7.0	6.0	5.0	6.7	2.0	5.7	
RENEGADE	6.0	5.7	5.7	5.3	6.0	6.0	4.7	8.3	5.0	6.7	7.0	7.0	5.7	6.0	5.0	5.7	5.3	5.7	3.7	7.0	6.0	5.3	6.3	2.0	5.7	
FALCON II	6.7	6.3	5.3	6.0	6.3	5.0	5.0	7.0	5.0	6.7	6.7	6.0	6.0	4.3	5.3	7.0	5.7	4.0	3.3	7.0	6.0	5.0	6.7	2.0	5.6	
BONSAI	6.0	6.0	6.0	6.7	6.0	5.3	5.0	7.0	4.7	6.3	7.7	6.0	4.7	4.7	5.0	7.0	5.7	4.7	2.7	7.0	6.0	5.7	6.0	2.0	5.6	
ISI-TF10	6.7	6.0	6.0	6.0	6.0	5.7	4.7	7.3	5.0	6.3	7.3	6.0	5.0	5.3	6.0	6.0	5.7	4.3	3.0	7.0	6.0	5.7	6.0	2.0	5.6	
EC-101	6.0	5.7	5.0	5.7	6.0	5.7	4.7	7.3	5.0	6.3	7.3	6.0	5.0	5.3	6.0	6.0	5.7	4.3	3.0	7.0	6.0	5.7	6.0	2.0	5.6	
GOOD-EN (KOOS 96-14)	6.0	5.7	5.7	5.7	6.0	5.3	5.0	6.7	5.0	6.3	7.3	6.0	5.0	5.3	6.0	6.0	5.7	4.3	3.0	7.0	6.0	5.3	6.0	2.0	5.6	
MB 28	6.3	6.0	5.3	5.5	6.3	5.7	5.0	6.7	5.0	6.3	7.3	7.0	5.3	5.7	5.7	6.3	6.7	4.3	3.3	7.3	6.0	5.3	6.3	2.0	5.6	
MARKSMAN	6.3	5.3	4.7	5.5	6.7	6.7	5.0	8.0	4.7	6.3	6.7	6.0	5.3	5.0	6.0	7.0	6.0	4.3	3.7	7.0	6.0	5.0	6.0	2.0	5.6	
GENESIS	7.0	6.3	4.7	5.5	6.7	6.0	5.0	7.7	4.7	6.3	7.7	6.0	4.7	4.7	5.0	7.0	5.3	4.3	3.0	6.7	7.0	5.0	6.3	1.7	5.6	
OFI-96-32	6.0	5.7	5.0	5.7	6.3	5.0	5.0	6.3	5.0	6.7	7.3	6.0	4.7	4.7	5.0	7.0	5.7	4.7	2.7	7.0	6.3	6.0	6.3	1.7	5.6	
FINELAWN PETITE	5.3	6.0	6.0	5.0	6.0	6.3	5.7	7.3	5.0	6.3	6.7	5.7	5.3	5.0	5.3	6.3	4.0	3.0	7.0	6.0	6.3	6.0	6.3	2.0	5.6	
WVPB-1D	7.3	5.7	5.0	6.3	6.0	5.0	5.0	7.7	5.0	6.3	6.7	5.7	4.7	5.3	5.7	6.3	6.3	3.7	3.3	7.0	6.7	5.7	6.0	2.0	5.6	
PSII-TF-10	6.0	5.3	4.7	5.7	6.3	6.0	5.3	6.0	4.3	6.3	6.7	6.3	5.7	4.3	6.0	6.7	6.0	4.3	3.0	7.0	6.0	5.3	6.0	1.3	5.5	
EQUINOX (TMI-N91)	5.0	6.3	5.7	7.0	6.0	6.0	6.0	7.0	4.0	6.7	7.0	6.0	4.0	4.0	5.0	6.3	4.3	4.3	3.0	7.0	6.0	5.3	5.3	1.7	5.5	
AXIOM (ATF-192)	6.7	6.0	6.0	5.7	6.3	5.0	6.0	6.0	5.0	6.0	6.3	6.0	6.0	4.0	6.0	6.3	4.3	5.0	3.0	6.7	6.3	5.3	5.7	2.0	5.5	
CONSTOCK (SSDE31)	5.7	5.7	5.3	5.7	6.7	6.3	4.7	7.0	5.0	6.3	8.0	6.0	4.7	5.0	5.3	6.3	5.3	4.3	3.0	7.0	6.0	5.0	6.3	1.7	5.5	
LEPRECHAUN	6.3	5.7	6.0	5.0	5.7	5.7	5.0	5.3	5.0	6.3	6.7	5.7	5.3	5.0	5.7	6.3	5.3	4.0	3.0	7.0	6.0	5.0	6.3	1.7	5.5	
JITFA-96	4.7	5.3	5.0	5.0	5.7	6.3	5.3	6.0	4.3	6.0	7.3	6.3	5.3	5.3	5.7	6.7	6.0	4.3	3.0	7.0	5.7	5.3	6.3	2.0	5.5	
JSC-1	5.3	5.7	5.0	6.0	6.7	6.7	4.7	6.7	4.3	5.7	6.7	6.0	5.3	4.7	5.7	6.3	6.3	4.3	3.0	7.0	6.0	5.0	6.7	1.3	5.5	
WPEZE (WVPB-1C)	5.3	6.0	6.0	6.0	6.0	6.0	6.0	5.7	4.3	7.0	6.7	5.7	5.7	5.3	6.0	6.3	6.3	4.3	3.0	7.0	6.0	5.0	6.3	1.7	5.5	
DLF-1	5.7	5.7	5.7	5.5	5.5	6.0	5.3	8.3	3.7	6.0	7.0	6.0	5.3	4.7	6.0	6.3	5.0	3.7	3.0	6.7	6.0	5.0	6.3	1.7	5.4	
LION	5.3	5.3	5.3	6.3	6.7	5.0	4.7	7.3	5.0	5.7	6.7	6.0	4.0	4.3	5.7	6.3	6.3	4.0	3.0	6.7	6.0	5.3	5.3	1.3	5.4	
PSII-TF-9	5.0	6.0	5.0	6.5	5.7	6.3	5.3	6.7	4.7	6.3	7.0	6.0	4.0	4.3	5.7	6.3	6.3	4.3	3.0	7.0	6.0	4.7	6.3	1.7	5.4	
JITFC-96	5.3	5.3	5.7	7.5	5.3	4.3	5.0	5.3	4.7	6.3	6.0	5.7	5.7	4.0	6.3	5.0	5.7	4.3	3.0	7.0	6.0	4.7	6.3	1.0	5.3	
ARID	5.0	6.0	4.7	6.3	6.0	5.0	4.7	5.3	4.7	5.7	5.7	4.3	5.0	3.3	5.3	5.7	4.3	4.7	3.3	6.0	5.0	4.3	5.7	1.3	5.1	
DP 7952	4.7	5.7	4.3	5.3	5.3	5.7	4.7	5.0	3.7	6.7	5.0	6.3	4.7	3.7	5.0	5.7	4.7	3.7	3.0	6.7	6.0	4.3	5.7	1.7	4.9	
AV-1	3.0	3.0	4.0	6.3	4.0	4.0	3.0	4.0	2.3	4.0	4.0	4.0	3.7	2.0	4.0	2.7	2.0	1.3	2.0	6.0	5.0	5.3	5.3	1.0	4.9	
KENTUCKY-31 W/ENDO.	1.4	0.9	0.7	2.0	1.0	1.5	1.2	2.0	0.8	0.8	1.0	1.1	1.1	1.4	0.9	1.3	1.3	1.1	1.0	0.7	0.7	1.1	0.9	0.8	0.2	
LSD VALUE	13.0	9.2	8.0	21.4	9.2	15.7	13.6	17.1	9.2	7.5	8.1	10.4	11.9	15.3	9.3	11.3	12.8	14.2	19.1	6.2	7.4	11.7	8.8	22.5	12.2	
C.V. (%)	1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).																									
2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.																										

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Table 31 (cont.)

TABLE 34. WINTER COLOR RATINGS OF TALL FESCUE CULTIVARS 1/
1998 DATA

WINTER COLOR RATINGS 1-9; 9=COMPLETE COLOR RETENTION 2/

NAME	OK1	NAME	OK1
JTTFA-96	5.3	TULSA	3.7
ARID	4.3	TWILIGHT II (TMI-TW)	3.7
AV-1	4.3	APACHE II	3.3
DP 7952	4.3	ARID 2 (J-3)	3.3
RESERVE (ATF-182)	4.3	ATF-188	3.3
BONSAI 2000 (BULLET)	4.0	ATF-253	3.3
CROSSFIRE II	4.0	BAR FA 6LV	3.3
FALCON II	4.0	BAR FA6 US1	3.3
FINELAWN PETITE	4.0	BAR FA6D USA	3.3
PST-523	4.0	COCHISE II	3.3
RED COAT (ATF-038)	4.0	CORONADO GOLD (PST-5RT)	3.3
REGIMENT	4.0	COYOTE	3.3
WVPB-18	4.0	CU9502T	3.3
ANTHEM II (TMI-FMH)	3.7	DLF-1	3.3
ATF-020	3.7	ISI-TF11	3.3
ATF-257	3.7	MARKSMAN	3.3
AXIOM (ATF-192)	3.7	MASTERPIECE (LTP-SD-TF)	3.3
AZTEC II (TMI-AZ)	3.7	MB 211	3.3
BANDANA (PST-R5AE)	3.7	MB 212	3.3
BRAVO (RG-93)	3.7	MB 216	3.3
CHAPEL HILL (TA-7)	3.7	MUSTANG II	3.3
COMSTOCK (SSDE31)	3.7	OFI-951	3.3
CORONADO	3.7	OFI-96-31	3.3
CU9501T	3.7	OFI-96-32	3.3
DP 50-9011	3.7	OFI-FWY	3.3
EC-101	3.7	OLYMPIC GOLD (PST-5E5)	3.3
EQUINOX (TMI-N91)	3.7	PEDESTAL (PC-AO)	3.3
GENESIS	3.7	PICK FA 20-92	3.3
JAGUAR 3	3.7	PIXIE E+	3.3
JSC-1	3.7	PST-5M5	3.3
JTFFC-96	3.7	PST-5T0	3.3
KENTUCKY-31 W/ENDO.	3.7	REMBRANDT (LTP-4026 E+)	3.3
MB 26	3.7	RENEGADE	3.3
MB 29	3.7	SHENANDOAH	3.3
MILLENNIUM (TMI-RBR)	3.7	SR 8210	3.3
OFI-931	3.7	SRX 8084	3.3
PICK FA XK-95	3.7	WPEZE (WVPB-1C)	3.3
PLANTATION (PENNINGTON-1901)	3.7	SCORPION (ZPS-2PTF)	3.3
PRO 8430	3.7	ARID 3 (J-98)	3.0
REBEL SENTRY (AA-A91)	3.7	ATF-196	3.0
SAFARI	3.7	BAR FA 6D	3.0
SHENANDOAH II (VRS2)	3.7	BAR FA6 US3	3.0
TAR HEEL	3.7	BAR FA6 US6F	3.0
TITAN 2	3.7	BONSAI	3.0

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TABLE 34. WINTER COLOR RATINGS OF TALL FESCUE CULTIVARS
(CONT'D) 1998 DATA

WINTER COLOR RATINGS 1-9; 9=COMPLETE COLOR RETENTION

NAME	OK1
BRANDY (J-101)	3.0
BULLDAWG (PICK GA-96)	3.0
DUSTER	3.0
EA 41	3.0
EMPRESS	3.0
GAZELLE	3.0
GOOD-EN (KOOS 96-14)	3.0
ISI-TF10	3.0
ISI-TF9	3.0
KITTY HAWK S.S.T. (SS45DW)	3.0
LEPRECHAUN	3.0
LION	3.0
MB 210	3.0
MB 213	3.0
MB 214	3.0
MB 215	3.0
MB 28	3.0
PICK FA 15-92	3.0
PICK FA 6-91	3.0
PICK FA N-93	3.0
PICK FA UT-93	3.0
PICK RT-95	3.0
PSII-TF-10	3.0
PSII-TF-9	3.0
R5AU	3.0
REBEL 2000 (AA-989)	3.0
SHORTSTOP II	3.0
SOUTHERN CHOICE	3.0
SRX 8500	3.0
SUNPRO	3.0
TOMAHAWK-E	3.0
WATCHDOG (PICK FA B-93)	3.0
WOLFPACK (PST-R5TK)	3.0
WVPB-1D	3.0
ZPS-5LZ	3.0
ARABIA (J-5)	2.7
BAR FA6 US2U	2.7
VELOCITY (AA-983)	2.7
WX3-275	2.7
ALAMO E	2.3
ATF-022	2.3
LSD VALUE	1.0
C.V. (%)	18.1

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 38. RED THREAD RATINGS OF TALL FESCUE CULTIVARS 1/
1998 DATA

RED THREAD RATINGS 1-9; 9=NO DISEASE 2/

NAME	VA1	NAME	VA1
AV-1	8.0	PICK FA N-93	6.7
COMSTOCK (SSDE31)	8.0	PIXIE E+	6.7
KENTUCKY-31 W/ENDO.	8.0	PST-523	6.7
ATF-020	7.7	R5AU	6.7
BONSAI	7.7	REGIMENT	6.7
DP 7952	7.7	RENEGADE	6.7
ARID	7.3	SOUTHERN CHOICE	6.7
DLF-1	7.3	SR 8210	6.7
EQUINOX (TMI-N91)	7.3	TOMAHAWK-E	6.7
GOOD-EN (KOOS 96-14)	7.3	ARID 2 (J-3)	6.3
JSC-1	7.3	BRANDY (J-101)	6.3
JTFC-96	7.3	GENESIS	6.3
PSII-TF-10	7.3	LION	6.3
REBEL SENTRY (AA-A91)	7.3	MB 211	6.3
RED COAT (ATF-038)	7.3	MB 216	6.3
TITAN 2	7.3	MB 28	6.3
WPEZE (WVPB-1C)	7.3	PICK FA 15-92	6.3
AZTEC II (TMI-AZ)	7.0	PICK FA 6-91	6.3
CHAPEL HILL (TA-7)	7.0	PLANTATION (PENNINGTON-1901)	6.3
JTTFA-96	7.0	PSII-TF-9	6.3
LEPRECHAUN	7.0	REBRANDT (LTP-4026 E+)	6.3
MARKSMAN	7.0	SUNPRO	6.3
OFI-96-31	7.0	VELOCITY (AA-983)	6.3
OFI-96-52	7.0	ANTHEM II (TMI-FMN)	6.0
PEDESTAL (PC-AO)	7.0	ARABIA (J-5)	6.0
RESERVE (ATF-182)	7.0	ARID 3 (J-98)	6.0
SHENANDOAH	7.0	ATF-022	6.0
TULSA	7.0	ATF-257	6.0
WVPB-1D	7.0	BANDANA (PST-R5AE)	6.0
ZPS-5LZ	7.0	CU9501T	6.0
ALAMO E	6.7	EA 41	6.0
BULLDAG (PICK GA-96)	6.7	EC-101	6.0
CORONADO GOLD (PST-5RT)	6.7	ISI-TF10	6.0
CU9502T	6.7	ISI-TF11	6.0
DP 50-9011	6.7	MB 213	6.0
ISI-TF9	6.7	MB 215	6.0
JAGUAR 3	6.7	MUSTANG II	6.0
KITTY HAWK S.S.T. (SS45DW)	6.7	PICK FA 20-92	6.0
MB 212	6.7	PICK FA XK-95	6.0
MB 214	6.7	PRO 8430	6.0
MB 26	6.7	REBEL 2000 (AA-989)	6.0
MB 29	6.7	SAFARI	6.0
MILLENNIUM (TMI-R8R)	6.7	SHENANDOAH II (WRS2)	6.0
OLYMPIC GOLD (PST-5E5)	6.7	SHORTSTOP II	6.0

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TABLE 38. RED THREAD RATINGS OF TALL FESCUE CULTIVARS
(CONT'D) 1998 DATA

NAME	RED THREAD RATINGS 1-9; 9=NO DISEASE	VA1
SRX 8500		6.0
TWILIGHT II (TML-TW)		6.0
WX3-275		6.0
APACHE II		5.7
ATF-188		5.7
ATF-253		5.7
COCHISE II		5.7
COYOTE		5.7
CROSSFIRE II		5.7
FALCON II		5.7
OFI-931		5.7
OFI-FWY		5.7
SRX 8084		5.7
WOLFPACK (PST-R5TK)		5.7
BAR FA 6LV		5.3
BAR FA6 US3		5.3
BAR FA60 USA		5.3
BONSAI 2000 (BULLET)		5.3
MB 210		5.3
OFI-951		5.3
PICK FA UT-93		5.3
PICK RT-95		5.3
PST-510		5.3
BAR FA 6D		5.0
PST-5M5		5.0
WVP8-1B		5.0
AXIOM (ATF-192)		4.7
BAR FA6 US6F		4.7
DUSTER		4.7
ATF-196		4.3
BAR FA6 US2U		4.3
EMPRESS		4.3
FINELAWN PETITE		4.3
GAZELLE		4.3
SCORPION (ZPS-2PTF)		4.3
BRAVO (RG-93)		4.0
MASTERPIECE (LTP-SD-TF)		4.0
TAR HEEL		3.7
CORONADO		3.3
WATCHDOG (PICK FA B-93)		3.3
BAR FA6 US1		2.3
LSD VALUE		2.0
C.V. (%)		20.4

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 43. BROWN PATCH RATINGS OF TALL FESCUE CULTIVARS 1/
AT FAYETTEVILLE, AR 2/
1998 DATA

BROWN PATCH RATINGS 1-9; 9=NO DISEASE

NAME	JULY	SEPTEMBER	MEAN	NAME	JULY	SEPTEMBER	MEAN
ATF-257	9.0	7.0	8.0	REBRANDT (LTP-4026 E+)	8.3	4.7	6.5
COYOTE	7.7	7.7	7.7	RESERVE (ATF-182)	7.7	5.3	6.5
JAGUAR 3	7.7	7.7	7.7	SHENANDOAH II (WRS2)	7.3	5.7	6.5
ATF-253	8.3	6.7	7.5	SHORTSTOP II	7.0	6.0	6.5
COCHRISE II	7.7	7.3	7.5	SR 8210	6.7	6.3	6.5
LION	7.3	7.7	7.5	TITAN 2	7.7	5.3	6.5
EQUINOX (TMI-N91)	7.3	7.3	7.3	ATF-020	7.0	5.7	6.3
ISI-TF11	8.0	6.7	7.3	AV-1	7.0	5.7	6.3
PST-5M5	8.3	6.3	7.3	BAR FA6 US2U	7.7	5.0	6.3
CHAPEL HILL (TA-7)	7.7	6.7	7.2	CROSSFIRE II	7.3	5.3	6.3
ISI-TF9	7.3	7.0	7.2	EA 41	6.0	6.7	6.3
KENTUCKY-31 W/ENDO.	7.3	7.0	7.2	EC-101	7.3	5.3	6.3
MB 212	8.0	6.3	7.2	GENESIS	7.7	5.0	6.3
COMSTOCK (SSDE31)	7.0	7.0	7.0	JITFC-96	7.7	5.0	6.3
DLF-1	7.0	7.0	7.0	PEDESTAL (PC-AO)	7.3	5.3	6.3
MUSTANG II	8.3	5.7	7.0	PICK FA XK-95	7.0	5.7	6.3
PST-523	8.7	5.3	7.0	PRO 8430	7.3	5.3	6.3
BONSAI 2000 (BULLET)	7.3	6.3	6.8	SOUTHERN CHOICE	7.3	5.3	6.3
BRAVO (RG-93)	7.0	6.7	6.8	TAR HEEL	8.0	4.7	6.3
MB 210	7.7	6.0	6.8	TULSA	6.3	6.3	6.3
MB 211	7.3	6.3	6.8	WPEZE (WVPB-1C)	8.7	4.0	6.3
OFI-96-31	7.0	6.7	6.8	WVPB-1B	6.7	6.0	6.3
RED COAT (ATF-038)	6.7	7.0	6.8	SCORPION (ZPS-2PTF)	7.7	5.0	6.3
WVPB-1D	8.0	5.7	6.8	APACHE II	7.0	5.3	6.2
ARID 3 (J-98)	6.7	6.7	6.7	ATF-196	5.7	6.7	6.2
CORONADO GOLD (PST-5RT)	8.0	5.3	6.7	AZTEC II (TMI-AZ)	7.0	5.3	6.2
CU9501T	7.7	5.7	6.7	BAR FA6 US1	7.0	5.3	6.2
MASTERPIECE (LTP-SD-TF)	7.3	6.0	6.7	BAR FA6 US3	7.7	4.7	6.2
MB 213	7.3	6.0	6.7	DP 50-9011	7.0	5.3	6.2
MB 29	6.7	6.7	6.7	EMPRESS	7.3	5.0	6.2
OLYMPIC GOLD (PST-5E5)	8.7	4.7	6.7	KITTY HAWK S.S.T. (SS45DH)	6.3	6.0	6.2
PSII-TF-9	7.0	6.3	6.7	MB 28	6.7	5.7	6.2
WATCHDOG (PICK FA 8-93)	8.0	5.3	6.7	SHENANDOAH	7.0	5.3	6.2
ARID 2 (J-3)	6.3	6.7	6.5	VELOCITY (AA-983)	7.3	5.0	6.2
ATF-022	7.7	5.3	6.5	ARID	6.3	5.7	6.0
ATF-188	7.0	6.0	6.5	BANDANA (PST-R5AE)	7.0	5.0	6.0
ISI-TF10	7.7	5.3	6.5	CU9502T	7.7	4.3	6.0
JTTFA-96	7.0	6.0	6.5	JSC-1	6.7	5.3	6.0
LEPRECHAUN	7.3	5.7	6.5	MARKSMAN	8.0	4.0	6.0
MILLENNIUM (TMI-RBR)	7.7	5.3	6.5	MB 215	6.7	5.3	6.0
PICK FA 20-92	8.0	5.0	6.5	OFI-96-32	7.3	4.7	6.0
PICK FA 6-91	7.3	6.3	6.5	OFI-FWY	7.3	4.7	6.0
PLANTATION (PENNINGTON-1901)	8.0	5.0	6.5	PICK FA N-93	6.0	6.0	6.0
PSII-TF-10	7.3	5.7	6.5	TWILIGHT II (TMI-TW)	7.0	5.0	6.0
PST-5T0	7.3	5.7	6.5	WOLFPACK (PST-R5TK)	8.0	4.0	6.0
R5AU	8.3	4.7	6.5	ALAMO E	5.0	6.7	5.8
REBEL SENTRY (AA-A91)	7.3	5.7	6.5	AXIOM (ATF-192)	6.0	5.7	5.8

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TABLE 43. BROWN PATCH RATINGS OF TALL FESCUE CULTIVARS AT FAYETTEVILLE, AR 1998 DATA

BROWN PATCH RATINGS 1-9; 9=NO DISEASE

NAME	JULY	SEPTEMBER	MEAN
BRANDY (J-101)	5.7	6.0	5.8
MB 214	6.3	5.3	5.8
PICK RT-95	7.0	4.7	5.8
REBEL 2000 (AA-989)	8.7	3.0	5.8
RENEGADE	7.3	4.3	5.8
ANTHEM II (TMI-FHN)	6.7	4.7	5.7
BULLDANG (PICK GA-96)	6.3	5.0	5.7
OF1-951	6.0	5.3	5.7
PICK FA 15-92	5.3	6.0	5.7
SAFARI	7.7	3.7	5.7
SRX 8500	6.0	5.3	5.7
WX3-275	6.7	4.7	5.7
DP 7952	5.3	5.7	5.5
FINELAWN PETITE	6.3	4.7	5.5
MB 26	5.7	5.3	5.5
SUNPRO	6.3	4.7	5.5
ARABIA (J-5)	5.3	5.3	5.3
MB 216	6.3	4.3	5.3
PICK FA UT-93	4.7	6.0	5.3
ZPS-5LZ	5.7	5.0	5.3
BAR FA60 USA	6.0	4.3	5.2
DUSTER	7.0	3.3	5.2
PIXIE E+	6.7	3.7	5.2
BAR FA 60	5.3	4.7	5.0
BONSAI	5.3	4.7	5.0
OF1-931	5.3	4.7	5.0
SRX 8084	5.7	4.3	5.0
CORONADO	5.7	4.0	4.8
FALCON II	6.0	3.7	4.8
GOOD-EN (KOOS 96-14)	6.3	3.3	4.8
REGIMENT	6.3	3.3	4.8
TOMAHAWK-E	6.0	3.7	4.8
BAR FA 6LV	5.0	3.3	4.2
BAR FA6 US&F	5.7	2.7	4.2
GAZELLE	5.3	2.7	4.0
LSD VALUE	2.0	5.8	2.9
C.V. (%)	14.9	31.5	17.2

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 37. LEAF SPOT RATINGS OF TALL FESCUE CULTIVARS 1/ 1997 DATA

NAME	ME1	NAME	ME1	NAME	ME1
COYOTE	8.7	PICK FA 6-91	6.0	LION	4.7
MILLENNIUM (TMI-RBR)	8.7	PLANTATION (PENNINGTON-1901)	6.0	MARKSMAN	4.7
CU9502T	7.7	PST-5W5	6.0	PICK FA UT-93	4.7
GAZELLE	7.7	RENEGADE	6.0	PST-5TO	4.7
PICK FA N-93	7.7	ZPS-2PTF	6.0	TAR HEEL	4.7
PRO 8430	7.7	APACHE II	5.7	TITAN 2	4.7
ZPS-5LZ	7.7	ATF-020	5.7	ATF-022	4.3
BAR FA6D USA	7.3	BAR FA6 US2U	5.7	ATF-038	4.3
MB 210	7.3	CORONADO GOLD (PST-5RT)	5.7	ATF-192	4.3
MB 214	7.3	JAGUAR 3	5.7	ATF-196	4.3
REBEL 2000 (AA-989)	7.3	PICK RT-95	5.7	BRAVO (RG-93)	4.3
REBRANDT (LTP-4026 E+)	7.3	PIXIE E+	5.7	OFI-96-32	4.3
WOLFPACK (PST-R5TK)	7.3	RESERVE (ATF-182)	5.7	PC-AO	4.3
AA-983	7.0	SHORTSTOP II	5.7	TOMAHAWK-E	4.3
GENESIS	7.0	SUNPRO	5.7	WX3-275	4.3
MB 216	7.0	AZTEC II (TMI-AZ)	5.3	ANTHEM II (TMI-FMN)	4.0
PST-5E5	7.0	BAR FA6 US1	5.3	ATF-257	4.0
SRX 8084	7.0	FALCON II	5.3	ISI-TF10	4.0
TA-7	7.0	FINELAWN PETITE	5.3	PST-523	4.0
ARABIA (J-5)	6.7	ISI-TF9	5.3	REGIMENT	4.0
BANDANA (PST-R5AE)	6.7	J-101	5.3	SRX 8500	4.0
BAR FA6 US3	6.7	JITFA-96	5.3	TULSA	4.0
CU9501T	6.7	MB 211	5.3	TWILIGHT II (TMI-TW)	4.0
MB 215	6.7	MUSTANG II	5.3	DP 7952	3.7
MB 26	6.7	OFI-931	5.3	DUSTER	3.7
PICK GA-96	6.7	PICK FA 15-92	5.3	EA 41	3.7
WR52	6.7	PICK FA 20-92	5.3	OFI-FWY	3.7
WVBB-1B	6.7	SAFARI	5.3	PSII-TF-10	3.7
ATF-188	6.3	SHEANDOAH	5.3	SOUTHERN CHOICE	3.7
BAR FA 6D	6.3	SR 8210	5.3	ALAMO E	3.3
CORONADO	6.3	ARID 2 (J-3)	5.0	ARID	3.3
CROSSFIRE II	6.3	ARID 3 (J-98)	5.0	AV-1	3.3
GOOD-EN (KOOS 94-14)	6.3	BAR FA6 US6F	5.0	COMSTOCK (SSDE31)	3.3
MASTERPIECE (LTP-SD-TF)	6.3	COCHISE II	5.0	JSC-1	3.3
MB 29	6.3	DP 50-9011	5.0	PICK FA XK-95	3.3
OFI-96-31	6.3	EC-101	5.0	KENTUCKY-31 W/ENDO.	3.0
PSII-TF-9	6.3	EQUINOX (TMI-N91)	5.0	WPEZE (WVBB-1C)	3.0
BAR FA 6LV	6.0	JITFC-96	5.0	DLF-1	2.7
BONSAI 2000 (BULLET)	6.0	KITTY HAWK S.S.T. (SS450W)	5.0	REBEL SENTRY (AA-A91)	2.7
ISI-TF11	6.0	PICK FA B-93	5.0	LSD VALUE	3.1
LEPRECHAUN	6.0	R5AU	5.0	C.V. (%)	35.2
MB 212	6.0	WVBB-1D	5.0		
MB 213	6.0	ATF-253	4.7		
MB 28	6.0	BONSAI	4.7		
OFI-951	6.0	EMPRESS	4.7		

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

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TABLE 39.

PYTHIUM BLIGHT RATINGS OF TALL FESCUE CULTIVARS 1/
1997 DATA

PYTHIUM BLIGHT RATINGS 1-9; 9=NO DISEASE 2/

NAME	KS2	NAME	KS2	NAME	KS2
TOMAHAWK-E	7.3	GENESIS	4.7	BAR FA6 US2U	3.3
KENTUCKY-31 W/ENDO.	7.0	MB 213	4.7	COYOTE	3.3
AV-1	6.7	MB 214	4.7	CROSSFIRE II	3.3
ISI-TF10	6.7	MB 26	4.7	EC-101	3.3
JSC-1	6.7	PICK FA 20-92	4.7	MB 211	3.3
KITTY HAWK S.S.T. (SS45DW)	6.7	WRS2	4.7	PICK FA 15-92	3.3
RENEGADE	6.7	ANTHEM II (TMI-FMN)	4.3	PST-523	3.3
DP 7952	6.3	BAR FA6 US3	4.3	REBEL SENTRY (AA-A91)	3.3
JTFFC-96	6.3	BONSAI 2000 (BULLET)	4.3	TA-7	3.3
GOOD-EN (KOOS 94-14)	6.3	EA 41	4.3	WPEZE (WVP8-1C)	3.3
OFI-931	6.3	EQUINOX (TMI-N91)	4.3	DUSTER	3.0
FALCON II	6.0	MB 212	4.3	MB 215	3.0
FINELAWN PETITE	6.0	PC-AO	4.3	MILLENNIUM (TMI-RBR)	3.0
PRO 8430	6.0	PICK RT-95	4.3	SRX 8500	3.0
SAFARI	6.0	SHENANDOAH	4.3	SUNPRO	3.0
APACHE II	5.7	SR 8210	4.3	TULSA	3.0
CU9502T	5.7	SRX 8084	4.3	AA-983	2.7
DLF-1	5.7	TITAN 2	4.3	ATF-188	2.7
LEPRECHAUN	5.7	WVPB-10	4.3	ATF-192	2.7
MASTERPIECE (LTP-SD-TF)	5.7	ZPS-2PTF	4.3	ATF-257	2.7
PICK FA 6-91	5.7	ARID	4.0	BANDANA (PST-R5AE)	2.7
PST-5E5	5.7	BAR FA6 US6F	4.0	OFI-951	2.7
WVPB-1B	5.7	BRAVO (RG-93)	4.0	PIXIE E+	2.7
BAR FA 60	5.3	COMSTOCK (SSDE31)	4.0	R5AU	2.7
BAR FA6D USA	5.3	CORNADO GOLD (PST-5RT)	4.0	SOUTHERN CHOICE	2.7
DP 50-9011	5.3	CU9501T	4.0	WOLFPACK (PST-R5TK)	2.7
MB 210	5.3	EMPRESS	4.0	JTFFA-96	2.3
MB 216	5.3	ISI-TF11	4.0	REMBRANDT (LTP-4026 E+)	2.3
MB 29	5.3	ISI-TF9	4.0	ZPS-5LZ	2.3
WX3-275	5.3	JAGUAR 3	4.0	J-101	2.0
ALAMO E	5.0	MB 28	4.0	MUSTANG II	2.0
BAR FA6 US1	5.0	PSII-TF-9	4.0	PICK FA B-93	2.0
BONSAI	5.0	RESERVE (ATF-182)	4.0	PICK FA UT-93	2.0
CORNADO	5.0	TAR HEEL	4.0	REGIMENT	2.0
MARKSMAN	5.0	TWILIGHT II (TMI-TW)	4.0	SHORTSTOP II	2.0
OFI-96-31	5.0	ARID 3 (J-98)	3.7	PLANTATION (PENNINGTON-1901)	1.7
OFI-96-32	5.0	COCHISE II	3.7	GAZELLE	1.3
OFI-FWY	5.0	LION	3.7	PICK GA-96	1.3
PSII-TF-10	5.0	PICK FA N-93	3.7	REBEL 2000 (AA-989)	1.0
PST-5M5	5.0	PICK FA XK-95	3.7	LSD VALUE	3.3
PST-5T0	5.0	ARID 2 (J-3)	3.3	C.V. (%)	48.5
ARABIA (J-5)	4.7	ATF-020	3.3		
ATF-253	4.7	ATF-022	3.3		
AZTEC II (TMI-AZ)	4.7	ATF-038	3.3		
BAR FA 6LV	4.7	ATF-196	3.3		

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

Table 36

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EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) Turf Merchants, Inc.	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER TMI-RBR	3. VARIETY NAME Millennium
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country) 33390 Tangent Loop Tangent, OR 97389	5. TELEPHONE (include area code) (541)926-8649	6. FAX (include area code) (541)926-4435
	7. PVPO NUMBER 9900368	

8. Does the applicant own all rights to the variety? Mark an "X" in appropriate block. If no, please explain. YES NO

9. Is the applicant (individual or company) a U.S. national or U.S. based company? YES NO
If no, give name of country

10. Is the applicant the original owner? YES NO If no, please answer one of the following:

a. If original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. national(s)?

YES NO If no, give name of country

b. If original rights to variety were owned by a company(ies), is(are) the original owner(s) a U.S. based company?

YES NO If no, give name of country

11. Additional explanation on ownership (if needed, use reverse for extra space):

The original developer of TMI-RBR was Rutgers University, who then entered a contractual agreement with Turf Merchants, Inc. to transfer ownership of the variety.

PLEASE NOTE:

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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